SUPPORTING HIGH SCHOOL COTEACHERS THROUGH A PROFESSIONAL LEARNING COMMUNITY

by
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Abstract

Coteaching can be a powerful instructional approach whereby a general education teacher and special education teacher simultaneously instruct both general education and special education students in the same classroom. However, high school coteachers are reluctant to teach in this setting due to lack of professional training and knowledge of coteaching best practices. Because of this, one method of recourse is to provide teachers the opportunity for structured dialogue regarding collaborative instructional planning during a professional learning community (PLC) meeting. Therefore, the intervention attempts to gather qualitative data regarding high school coteacher's experiences and efficacy when given the chance to gain knowledge of the coteaching models and instructional collaboration within an existing PLC structure.

Keywords: coteaching, collaborative teaching, team teaching, inclusion, collaborative planning

Dedication

This dissertation is dedicated to my children, Kaiya and Kenya Jr. (KJ), for always encouraging me with your words and Post-It notes saying “You got this!” or “I am proud of you, Mommy.” The both of you made my school journey worth it. To my parents, Jimmie and Quincey Watson, thank you for your unwavering love, support and care for me and the kids. To my Dad (Jimmie) thank you for teaching me perseverance, tenacity and grit as those traits gave me the strength to keep going when I wanted to give up.

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Executive Summary

The legal mandates set forth in both the No Child Left Behind Act (NCLB, 2002) and Every Student Succeed Act (ESSA, 2015) requires school districts to review their processes and practices to instructing students with disabilities. Long gone are the days when a student with an academic learning disability is instructed in separate classroom as their peer (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Prior to NCLB and ESSA, the Individuals with Disabilities Education Act (IDEA, 1997), mandate required that

> To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (Section 612 (a)(5)

Given the parameters set forth in IDEA, NCLB and ESSA, now schools allow students with disabilities to access the same curriculum as their general education peers (Dieker & Murawski, 2003). However, the statements presented in these acts force schools to review how these students receive their instructional accommodations and modifications set forth in their Individual Education Plans (IEPs; Scruggs, Mastropieri, & McDuffie, 2007). As such, the legal changes required the support of a special education teacher to work alongside a general education teacher (L. Cook & Friend, 1995). This academic partnership was considered collaborative teaching or coteaching and would be the answer to supporting students with disabilities in the mainstream classroom (Thousand, Villa, & Nevin, 2006). While the idea of having two certified teachers work together in the same classroom sounds great, without proper

training and support, this partnership may encounter many challenges (L. Cook, 2004). According to coteaching research, the two most challenging areas that both general education teachers and special education teachers have reported are inadequate professional training in coteaching and lack of mutual instructional planning time (Friend & Cook, 2007; Gerber & Popp, 2000; Hamilton-Jones & Vail, 2014; Murawski & Hughes, 2009; Thousand et al., 2006). The intention for coteaching is to provide an instructional environment where all students receive instructional support to access the information being presented to promote achievement; however, before that happens, coteaching best practices suggest that coteachers receive proper training before working together as well as instructional support during the school year (Van Garderen, Stormont, & Goel, 2012).

Qualitative Case Study

The purpose of this qualitative study describes and explains how job-embedded professional development (JEPD) supports collaborative instructional practices within a suburban school district (SSD; Croft, Coggshall, Dolan, & Powers, 2010). JEPD is defined as professional learning that occurs during daily practice within the teachers' professional context and connects research to practice that allows for teacher involvement in cooperative, inquiry-based work (Croft et al., 2010). The JEPD model allows teachers to learn on the job by asking questions, communicating ideas, expressing concerns and receiving feedback as it relates to their context and occurs within various formats, such as across departments, grade levels, or teacher teams (Venables, 2011). SSD uses an existing structure of JEPD, through a professional learning community (PLC) which is job-embedded source of professional development for teachers in attendance (Venables, 2011). Therefore, this case study describes how structured dialogue and reflection during a PLC supports collaborative instructional planning and practices for two ninth-

grade social studies general education and special education teachers (Murawski & Hughes, 2009).

Method and Analysis

The study was from October 2018 to January 2019 and consisted of five one-hour monthly PLC sessions. During the pre- and postsessions there was implementation of a Coteaching Rating Scale (CtRS; Gately & Gately, 2001) and open-ended teacher efficacy questions adapted from Tschannen-Moran and Hoy's (2001) Teacher Sense of Efficacy Scale. Within all the PLC sessions, the coteachers had a structured agenda that consisted of questions focused on coteaching best practices. During each session, the teacher openly discussed their coteaching goal and, specifically reflected upon if they met their goal or not. The CtRS was used as a catalyst for discussion. Lastly, the teachers attended a focus group session presenting their ideals and experiences coteaching and attending the PLC. The qualitative data collection used document review, focus group data and the researcher journal notes to help answer the research questions focused on how a PLC supports ninth-grade social studies coteachers' collaborative instructional practices and may influence their beliefs. The qualitative data drew upon the ninth-grade general and special education social studies teachers' experiences with discourse and reflection within the PLC sessions. An inductive coding approach was used to draw out commonalities or themes. Whereby, the raw data from the document review, focus group and researcher's journal were analyzed for themes to develop open codes and further analyzing to identify more connections to create subcodes (DeCuir-Gunby, Marshall, & McCulloch, 2011). Triangulation of data and member checking was used to validate the findings and to answer the research questions (Creswell, 2014).

Findings

The findings from this case study revealed that the CtRS (Gately & Gately, 2001) helped both teachers to identify their similarities and differences within the eight components of coteaching: (a) interpersonal communication, (b) physical arrangement, (c) familiarity with curriculum, (d) curriculum/goals modifications, (e) instructional planning, (f) instructional presentation, (g) classroom management and (h) assessment. In addition, as reported by their teacher efficacy questions, both had positive attitude towards their instructional practices. However, in the beginning of the study, the special educator had not taught a lesson, but by the end of the study, they implemented the team-teaching coteaching method where she was an actively involved in presenting the lesson (Friend et al., 2010).

In addition, there was an emergence of one major theme that indicated that there were interferences that challenged instructional collaboration: lack of planning time, in-school responsibilities, and feelings of frustration. Each of these areas, according to the participants, impacted their ability to collaborate on a weekly basis. For example, when they had to proctor a schoolwide test their planning time was taken, or when the special educator attended student meetings, impacted their ability to work together. They also mentioned losing planning time when students needed extra help with an assignment or meeting with other social studies colleagues. Unlike the traditional teacher that plans and instructs in isolation, coteachers are expected to work on all instructional practices as a team (Murawski & Swanson, 2001). In this case study, the teachers voiced their desire to work together, but shared how other variables impacted their ability to do so. In addition, they stated feelings of frustration when their planning schedule was interrupted and reported using creative collaboration like creating a Google classroom or texting one another at night. Above all, they said that nothing compared to working

in person. Therefore, if the goal of coteaching is to have a general educator and special educator share the responsibilities of planning, presenting and grading work for general education and special education students, then its critical for building-level stakeholders to provide and maintain the necessary time for collaboration (Shaffer & Thomas-Brown, 2015). Therefore, goal of this case study was to add to the body of knowledge by describing how structured opportunities for discourse, during a PLC, involving planning, collaboration, and reflection supports the coteaching relationship between the special education and general teacher pairs.

Recommendations

Based on this case study findings, some recommendations are to provide coteachers a one-day in-service training during the first week of the school. During this time, present the CtRS (Gately & Gately, 2001) and coteaching PowerPoint so that they identify their strengths and challenges within each coteaching component. In addition, they can learn about the coteaching models and create a coteaching goal to support collaboration. The coteachers appeared to benefit from having a PLC focused on coteacher collaboration. This recommendation is based on coteaching research that states that coteachers need training prior to working together, same planning time, and opportunities to discuss their instructional practices and reflection (Chanmugam, 2013; L. Cook & Friend, 1995; Friend et al., 2010). Lastly, research also suggest that building-level administrators schedule their coteachers with the same planning schedule ensure time collaboration (Gerber & Popp, 2000). According to Scruggs et al. (2007), administrative commitment helps to establish and maintain a collaborative partnership.

Chapter I

Understanding the Problem

The mandate of the No Child Left Behind Act (NCLB, 2002) required that each state be accountable for academic achievement of all students, including students with disabilities (SWDs). The statements set forth in this act forced school districts to review how they would promote rigorous instruction all while providing the necessary instructional accommodations and modifications so SWDs can achieve. Because of this, school districts placed a special education teacher in the mainstream classroom to work alongside a general education teacher (L. Cook & Friend, 1995). Now, the mandate in Every Student Succeed Act (ESSA, 2015) further advocates equity and achievement. The goal of both NCLB and ESSA is to improve the equitable instructional practices to increase academic achievement of all students. However, one challenge for the general education and special education teacher is how to effectively work together to support students without compromising instructional rigor that promotes achievement.

According to the suburban school district (SSD) testing data for High School Z (pseudonyms), fewer than 5% of SWDs (n = 185) met the standard score for the Partnership for Assessment of Readiness for College and Career (PARCC) English/Language Arts 10 (ELA). The PARCC ELA 10 is one of four state test requirements to receive a high school diploma. Based on empirical data, SWDs tend to struggle academically and the PARCC ELA low percentage (score) shows there is an underperformance for SWDs at High School Z. High School Z teachers use different instructional methods to accommodate and modify instructional activities so that SWDs can access the information. This chapter explores the special education landscape, broadly, with factors and causes that contribute to less than stellar educational outcomes for SWDs.

Special Education and the Law

The field of special education has made many advancements by raising standards and improving achievement for SWDs (Villa, Thousand, & Nevin, 2008). Progress was made by federal legislation such as the Education for All Handicapped Act of 1975 and Individuals with Disabilities Education Act of 1997 (IDEA) for children with disabilities to have access to free and appropriate public education (IDEA, 2004). Before these mandates were put in place, SWDs attended separate schools or were instructed in different classrooms from their peers (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Now, access to high-quality education is a right for all students and the reauthorization of IDEA requires districts to place these students in the least restrictive environment (LRE) which allows them to be mainstreamed into the regular education classroom participating with the general education curriculum and assessments (Murawski, 2009). Specifically, the IDEA (1997) mandate requires that

> To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (Section 612 (a)(5)

Moving forward, legislation of NCLB stated that SWDs can attend the same school as their peers and be instructed in the same classroom with the support of a highly qualified teacher (Murawski, 2009). In 2015, NCLB was replaced by ESSA which further promotes equity of disadvantaged and high-needs students.

The legal changes and the demand for increased rigor and academic achievement for all students is supposed to be a call for action for schools to review how they plan to meet these expectations. To address and support the SWD's learning needs, some schools adopted the inclusion model which places them in the mainstream general education classrooms (Murawski,

2009) with the instructional support of collaborative teaching (coteaching) to (Friend et al., 2010). The coteaching model includes a general education teacher and a special education teacher sharing the responsibilities of instructional planning and presentation, managing behavior, and grading work of students with various learning needs (Friend & Cook, 2007).

Collaborative Teaching

Coteaching is a powerful approach that provides services for mainstream classes (Murawski & Lochner, 2011) because working together allows them to share teaching strategies that support varied student learning styles (Hourcade & Bauwens, 2001; Putnam & Borko, 2000; Tschannen-Moran, Uline, Hoy, & Mackley, 2000). As such, an effective coteaching partnership encompasses (a) communication, (b) coordination, (c) cooperation, (d) problem solving and (e) negotiation to develop a healthy partnership (Friend & Pope, 2005). However, when two teachers with different training from different disciplines come together to teach one class, it can be difficult to coalesce. Hargreaves (2003) reports that true collaborative teaching increases teacher efficacy and a willingness to work with other teachers to promote better instructional practices. Given the challenges of coteaching, this literature review identifies how the lack of clarity of roles and responsibilities, and lack of common planning and professional development impact coteaching (Howard & Potts, 2009).

Exploring Coteaching as an Instructional Strategy

While there is limited research on the direct impact of coteaching on student achievement, Wilson and Michaels (2006) surveyed 127 SWDs and 219 general education students, all of which said that that they preferred coteaching because the instructional material was modified, they get more help on class assignments and they felt supported in the classroom. Solis, Vaughn, Swanson, and McCulley (2012) reported on student's perceptions of coteaching

and found that overall, students felt that having two teachers was beneficial for getting extra help and explaining directions. Unfortunately, there is limited research on coteaching in relation to student achievement but having two teachers facilitates lesson differentiation to increase the chances of accessing the material with can impact achievement (L. Cook & Friend, 1995). Magiera and Zigmond (2005) presented how the general education teacher and special education teacher supported the instructional process in a math class. In this instance, the general education teacher presented the lesson to the class with the special education teacher working with a smaller group of students. In cases like this, not only do SWDs benefit from having a second teacher, but so does other struggling learners. By having two qualified teachers in a class helps to scaffold information to promote learning. Overall, coteaching has benefits, but there are challenges that can impact both the partnership and student achievement.

Scruggs, Mastropieri, and McDuffie (2007) conducted a metasynthesis that showed that mutual instructional planning and teacher attitude are important aspects of successful coteaching. In a case study at a suburban high school in a southeastern U.S. school district, the researcher interviewed and observed classroom practices of two general classroom teachers and two special education teachers to identify problems that impacted coteacher implementation. The results indicated that inadequate planning time impacted the coteacher's ability to discuss instructional expectations and teacher's role and responsibilities (Trent, 1998). For instance, a general educator said, "I put the blame on both of us because we must set aside time to plan, but that's the hardest thing, finding time" (as cited in Villa et al., 2008, p. 508). Statements like this show that one teacher may have the best intentions of planning together, but the lack of mutual planning time can impact collaboration.

In addition to collaborative planning time, teachers report the need for professional training to properly implement the coteaching models (Gerber & Popp, 2000). Evidence suggests that when coteachers lack professional development, mutual planning time, or feel unsupported, they are more reluctant to work together (Friend et al., 2010). For example, in Trent (1998) a general education teacher reported feelings of hesitancy to work with a new special education teacher because she had a negative prior coteaching experience. DeBettencourt (1999) stated that "the teacher's use of effective instructional strategies has been consistently related to teacher attitudes concerning personal teaching effectiveness" (p. 28). If teacher reluctance is a factor in collaboration, then it behooves districts and schools to properly train and support the partnership.

Teacher Efficacy and Perceptions of Instructing Students With Disabilities

Teacher efficacy is a teacher's belief in his or her ability to positively impact student learning (Henson, 2001). When teachers feel more efficacious about what they are teaching, then they tend to engage in activities, such as creative class activities or discussions; however, feelings of less confidence may impact teacher engagement (Schunk, 2008). Due to the mandates set forth under NCLB that all students be held accountable for continuous achievement, research shows that secondary-level teachers who are less supportive of inclusion, are less likely to accommodate or modify instruction for SWDs (Scruggs & Mastropieri, 1996). Secondary-level coursework is content-based instruction and tests; therefore, teacher perception directly impacts how they choose to facilitate instruction which can impact achievement for SWDs (Van Garderen, Stormont, & Goel, 2012). Research has shown that preservice general education teachers are less positive about instructing SWDs because of lack of training and experience (Rice & Zigmond, 2000). As such, preservice teachers can benefit from professional

development opportunities so that coteachers can work together to present a lesson that is suitable of all learning styles (Rice & Zigmond, 2000).

When a teacher feels more efficacious about their pedagogy it affords them the willingness or persistence to go the extra mile when working with students. Conversely, if teachers with low efficacy believes there is little, they can do to enhance student learning (Bandura, 1993). According to Bruce, Esmonde, Ross, Dookie, and Beatty (2010), the four main areas of teacher efficacy are (a) mastery experiences or direct teachings that are challenging but highly successful, (b) vicarious experiences or watching a peer of similar ability levels teach challenging ideas with high success, (c) physiological or emotional states or feelings of success and confidence and (d) verbal persuasion or receiving positive feedback from students, peers, and superiors. Of these four areas of efficacy, according to research, mastery experiences have the most significant impact on a teacher's assessment of his or her ability to impact learning because successful direct teaching experiences breeds more confidence (Tschannen-Moran & Hoy, 2001). As such, research indicated that providing teacher professional learning opportunities helps to improve teacher efficacy (Bruce et al., 2010).

Professional learning opportunities is defined as professional learning embedded in the classroom context and constructed through experience and practice in sustained iterative cycles of goal setting/planning, practicing and reflecting (Bruce et al., 2010). Situated within professional learning is the importance of teacher collaboration where colleagues join in the instructional planning and presentation process by working together for the benefit of teacher and student learning (Puchner & Taylor, 2006). Therefore, professional learning implies that when teachers are given the chance to set goals, plan lessons, facilitate learning and reflect on their practices with a peer can increase a teacher's level of confidence. When teachers feel

confident in their teaching practices, then collaborating become a part of the school culture (Bruce et al., 2010).

Collaboration as part of the instructional process is key in the coteaching pair (Friend & Cook, 2007). The initial purpose of coteaching was to provide academic support for SWDs in a mainstream classroom (Gately & Gately, 2001). Now, research is showing how an effective partnership supports the learning environment for all students when teachers are knowledgeable of the coteaching model (Friend et al., 2010).

Coteaching Models

Coteaching draws on the strength of both the general educator, who understands the course content, and the special educator, who identifies learning needs of individual students to accommodate and modify instruction to match these needs (Magiera & Zigmond, 2005). In the classroom, coteaching can happen in different formats (Appendix J):

- One teach–one assist—both teachers are present in the classroom, however, one teacher assumes the lead role to facilitate the lesson while the other teacher observes student behavior and assists students as needed.
- Station teaching—the teachers split the instructional content into two or more parts to be presented in separate locations in the classroom. For example, with two coteachers and two stations, each teacher would take one half of the material to teach and then trade student groups to repeat the lesson.
- Team teaching—both teachers are present in the classroom and are active participants while the instructional activity happens. In this case, teachers may take turns speaking or leading the discussion, one may speak while the other takes notes on the board, or one may ask probing questions while the other answers.

- Parallel teaching—the teachers plan the instruction jointly, but each teacher delivers the lesson to half the class; therefore, reducing the student to teacher ratio. For instance, given a class size of 30 students, one teacher instructs a group of 15 students and the teacher has a group of 15 students.
- Alternate teaching—one teacher instructs a smaller group of students, while the other teacher instructs the larger class. In this example, one teacher may use the smaller group for preteaching of information for academically struggling students or reteaching of information for absent students (Murawski & Spencer, 2011).

Because of the various coteaching models, this partnership requires time to collaborate on which methods serves best for the instructional lesson (Murawski & Spencer, 2011). Seminal researcher in coteaching, Murawski (2009) instructs coteachers to carve out time for instructional planning for parity. "General education teachers are more supportive of special education teachers presenting a lesson when they have taken time to discuss and plan the lesson as a team" (Murawski, 2009, p. 10). However, challenges with the coteaching process can occur when teachers lack training of coteaching best practices, unclear about their position and responsibilities, unfamiliar with the curriculum inadequate instructional planning time (Murawski, 2009; Villa et al., 2008). According to research on coteaching, when any part of the aforementioned factors are negated, the co-pair are likely to encounter challenges.

Coteaching Challenges

Austin (2001) interviewed 139 coteachers, from nine school districts in New Jersey. On each grade level, kindergarten through 12th grade, coteachers indicated that teachers need more training before working together and more specification of roles and responsibilities. In comparison, a two-year qualitative case study of four high school science and social studies

coteachers, Mastropieri et al. (2005) identified challenges such as consistently splitting the class resulting in the SWDs working in a separate room with the special education teacher; limiting time for the special education teacher to provide differentiated instruction or modification to the classroom activity; and limiting the different coteaching models being used during instruction. Scruggs et al. (2007) conducted a meta-analysis on coteaching in inclusive classroom across 32 original reports of qualitative research using over 454 coteachers, 42 administrators, 142 students and 26 parents. The report indicated that of the 25 elementary and middle schools, teachers said that SWDs were more successful in cotaught classes, showed more effort towards completing assignments and benefited from peer role models of appropriate classroom behavior. In addition, a common theme in this meta-analysis was that students felt that their academic and social needs were being met as opposed to being in a class with a single teacher. While this report does not directly show how coteaching impacts student achievement, the implications are that when SWDs attend mainstream classes supported by a general education and special education teachers that there are academic and social benefits.

Using a theatrical approach with coteaching where one teacher serves as the main actor and the other teacher serves in a supportive role, Preves and Stephenson (2009) assume dichotomous teaching positions to identify if unclear roles impact instruction and student–teacher interactions. They attempted to answer questions regarding the complexity of roles between general and special educators. Through interviewing, they identified that students were hesitant to ask questions or confused about which teacher to solicit support when the roles were unclear to the students. Overall, the outcome suggested that clarity of roles is critical because it brings stability to the students. In a comparison, Fennick and Liddy (2001) surveyed 95 general education teachers and 73 special education teachers from 13 different counties. The survey

included perceptions of teacher responsibilities, mutual planning time and preparation for collaborative teaching. Ironically, the perceptions of teachers' responsibilities mean differences indicated that both special education and general education teachers see themselves as being more responsible than the other for instructional delivery and behavior management. The result indicated that there is need for coteachers to know their role and responsibilities in the classroom to ensure an understanding between both teachers and students.

Common Planning Time

While a general educator can teach all students, SWDs come with an Individual Education Plan (IEP) that mandates the support of a highly qualified special educator (Isherwood & Barger-Anderson, 2008). For the instructional delivery process to go smoothly, mutual instructional planning time provides them with an opportunity to create lesson plans and tease out roles and responsibilities to establish a framework for collaboration (Friend et al., 2010; Hamilton-Jones & Vail, 2014; Howard & Potts, 2009; Scruggs et al., 2007). However, if coteachers do not have similar planning times, then they must be creative about planning, especially if they are resistant to working outside of their individual assigned planning time (Hamilton-Jones & Vail, 2014). Situations like this, sometimes force the general education teacher to plan alone and leaves the special education teacher uninformed and unprepared to participate fully in the lesson or to support the students (Fennick & Liddy, 2001).

Austin (2001) examined coteacher beliefs regarding teacher preparation and school-based support. The outcome revealed that 85% believe that coteaching is beneficial to students, but scheduled instructional planning time is an important part of readiness. Unfortunately, only 20% state that they have access to joint planning. In addition, 80% said that administrative support is critical to help with joint schedules and instructional planning, but only 40% reveal having

support. Weiss and Lloyd (2003) case study outlines the lack of participation of high school special education teachers delivering instruction because of their lack of content knowledge and limited support from the general education teachers. Conversely, in this same study, middle school special education coteachers who plan with their general education teachers actively participate in the instructional delivery (Weiss & Lloyd, 2003). Fennick and Liddy (2001), report that 54% of coteachers value the utility of release time for preparation as most beneficial for coteachers; however, 48% have no daily mutual planning time. In a qualitative study of two eighth-grade middle school coteachers observed for one year, the teachers began their school year coplanning and coteaching; however, by the end of the school year, the decreased amount of coplanning time impacted their relationship, and both reported dissatisfaction (Mastropieri et al., 2005). While there are several methods to coteaching, collaborative planning is an important aspect because, during this time, coteachers work together to plan instructional activities using the coteaching models and assign roles and responsibilities for the lesson (Kohler-Evans, 2006). Without this time, the general education teacher may inadvertently alienate the special education teacher during instructional delivery of activities in the classroom (Simmons & Magiera, 2007). Because of the usefulness of joint planning, administrators' can support their partnership by scheduling both teachers off at the same time or allocate time monthly for team building, long-range goal setting, and problem-solving sessions (Gerber & Popp, 2000). As such, a lack of joint planning time hinders collaboration, communication, and cooperation between coteachers. While shared planning time assists in unifying coteachers, professional development further facilitates collaboration of this "professional marriage" (O'Shea, Williams, & Sattler, 1999, p. 155).

Professional Training

Professional training provides the building blocks of the coteacher model to establish interpersonal relationships, curriculum development with goals and modifications, instructional planning and presentation, classroom management and grading assessments (Chanmugam, 2013; Isherwood & Barger-Anderson, 2008; Lesar, Benner, Habel, & Coleman, 1997; O'Shea et al., 1999; Pancsofar & Petroff, 2013). In addition, professional development is essential before and during implementation stages of coteaching (Simmons & Magiera, 2007). Because of the isolated nature of teaching, coteachers may feel inadequately prepared to work with another teacher; therefore, providing training gives each teacher the necessary knowledge, strategies and tools for coteaching. Keefe, Moore, and Duff (2004) report that secondary teachers lacked training and skills and have a more negative attitude about coteaching. Cramer and Nevin (2006) also reported that both general education and special education teachers from a large multicultural urban school system in the southeastern part of the United States feel underprepared when working with SWDs in an inclusive classroom. In a three-year study of 18 elementary and seven middle school teams with 119 teachers and 24 administrators involved in the development and implementation of an inclusion program, administrative support and professional development were major challenges (Walther-Thomas, 1997). Also, in the same study, both elementary and middle school teachers voiced a need for professional development to improve their coteaching skills. However, they were met with resistance because the administrative team did not see a need for training (Walther-Thomas, 1997). When the professional development experience is not available, and teachers from different disciplines try to work as a team, their unrelated educational preparation may cause conflicting expectations (Chanmugam, 2013). One way to alleviate this problem is for teacher pairs to attend school

district in-services and workshops or professional development opportunities on coteaching throughout the school year (Villa et al., 2008).

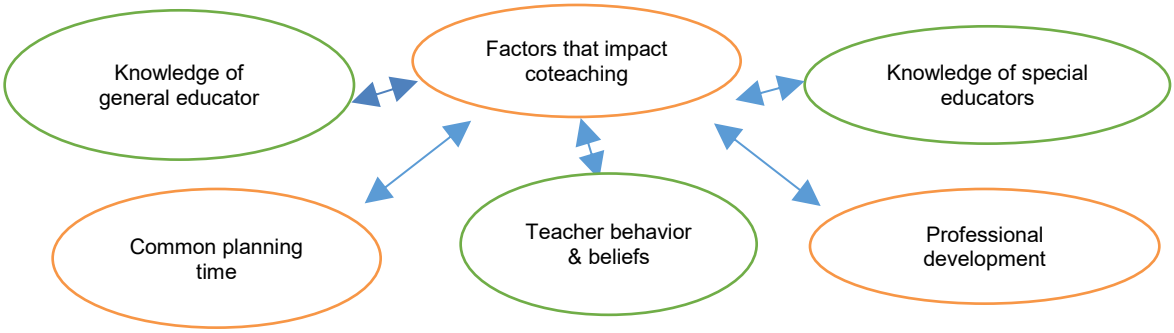


Figure 1. Factors that impact coteaching. This figure illustrates the author's conceptualization of factors that impact coteaching.

Conclusion

Based on current ESSA legislation, SWDs will continue to be mainstreamed into the general education classroom with the support of both general education and special education teachers. Therefore, coteaching is the instructional model used to facilitate an inclusive classroom. However, the literature indicates that some of the key challenges to effective coteaching are lack of coteacher professional development, inadequate instructional planning time, and unclear roles and responsibilities, all of which can impact student achievement.

Coteaching is a strategy employed by an SSD to support SWDs in the mainstream classroom. Per district policy doctoral students were not allowed to conduct a needs assessment, but had to use existing district data. The district contracted with a global research company WestEd to conduct a five-year analysis on the Special Education division of SSD focused on variety of educational concerns for the district and coteaching was among them (Bracco, Austin,

Bugler, & Finkelstein, 2015). The next chapter described the report in general and the findings around coteaching, within the district.

Chapter II

Needs Assessment

The school district associated with this study, SSD, has a policy that required doctoral students to utilize existing district data in lieu of conducting an individual needs assessment. A review of existing public research for SSD was conducted. A study performed by WestEd (Bracco et al., 2015) that investigated special education processes and services within SSD was determined to be the best source of exiting district data since its sole focus was issues related to special education. For the past 24 years, I have been employed with SSD as a high school special education teacher coteacher within both the English and social studies departments; however, in the last four years at High School Z, I have worked as a transition support teacher. In this position, the researcher is privy to work with all special education coteachers and all special education students. Given the nature of the position, she had several conversations with special education and general education coteachers, both individually and collectively, regarding their concerns and frustrations with coteaching. During one conversation, a general education teacher shared her reluctance with letting the special education teacher present a lesson. Upon further probing, it became apparent that this teacher lacked knowledge about the different coteaching styles and what was considered the best practices for coteaching. This is just one example of the many conversations that the researcher has had with coteachers regarding their coteaching experiences at High School Z. This chapter will briefly describe the WestEd study's methodology. Emphasis will be placed on the areas that specifically addresses data regarding coteaching. My problem of practice focuses how special education and general education coteachers struggle to collaborate regarding instructional practices because of lack of knowledge or training regarding coteaching best practices.

Context

SSD is in a Mid-Atlantic state serving approximately 1,016,667 people, with an annual budget of $2.3 billion (Bracco et al., 2015). The district is the largest in the state and 17th largest school district in the nation which includes 25 high schools serving a student population of more than 153, 852 students with 18,000 students (11.7%) receiving special education services. The target population employs approximately 417 high school special education teachers and 2,245 secondary general education teachers. The SSD policy on conducting research during the dissertation process disallowed the researcher to conduct a needs assessment. Because of this, data from a 2015 WestEd review of SSD's Special Education Department is used to establish the need for empirical examination regarding collaborative teaching practices between high school special education teachers and general education teachers (Bracco et al., 2015). The WestEd review examined the processes and procedures regarding fostering collaboration and discussion among general education teachers and special education teachers as it relates to the IEP development and implementation for SWDs (Bracco et al., 2015).

Statement of Purpose

As a part of the school district's mission of continuous improvement, the purpose was to review the processes and services to SWDs by

> Assessing the effectiveness and success of the processes used by the department of special education services and school-based staff for (a) IEP development-writing the IEP, (b) evaluates the effectiveness and success of the services pursuant to the IEP development, (c) examines the effectiveness and success of dispute resolution, (d) examines consistency in provision of those services and implementation of those processes across SSD schools and (e) provides recommendations for enhancing those services and processes. (Bracco et al., 2015, p. 5)

While the review involved the SSD staff, students and parents' perspectives regarding the processes and procedures in special education, the focus of this paper examined the general

education and special education teachers' perspectives as it related to the special education process and procedures related to collaborative practices.

WestEd Study Methodology

Procedure

WestEd used a mixed method approach to analyze both qualitative and quantitative data from parent and staff focus groups, staff interviews, classroom observations, parent listening sessions, parent and staff surveys and IEP reviews beginning in January 2015 to July 2015 (Bracco et al., 2015).

Target Population

The target population employs approximately 417 high school special education teachers and 2,245 secondary general education teachers. The total number of teachers surveyed were 785, 56. 8% general education teachers 43.2% special education teachers. More than 69. 3% of the teachers had more than five years of experience in SSD, 22.5% had 1–5 years of experience and 8.3% were new to SSD. Of these teachers, 45% elementary school, 23.8% middle school, and 29% high school. Of the 785 teachers, 94.6% reported teaching one or more SWDs. The demographics did not delineate between male or female and ethnicities.

Within the SSD, teachers have allocated planning time and schools have been directed to establish mutual planning for coteachers. However, according to the WestEd (Bracco et al., 2015) research review for SSD, 38% of secondary-level coteachers report not collaborating regarding instructional activities and student progress. The lack of collaboration between coteachers can impact the need for opportunities for differentiation for SWDs. The review also states, while there is evidence of collaboration, SSD should explore ways to increase collaboration between the general education and special education teachers (Bracco et al., 2015).

As discussed, the literature review states that professional development and common instructional planning time are essential facets of coteaching. Therefore, the SSD needs improving the professional development opportunities and mutual planning time for general education and special education coteachers.

WestEd (Bracco et al., 2015) in accordance with SSD's Board of Education examined the experiences of parents and students in relation to their experiences with IEP development, implementation, and dispute resolution. This was a review of practices that utilized a mixed-methods design (Bracco et al., 2015). WestEd staff employed at least two data collection methods per research question. Data collection methods included: (a) parent focus groups, (b) staff focus groups, (c) staff interviews, (d) parent surveys, (e) staff surveys, (f) classroom observations, and (g) document review (IEPs, district and state data).

Participants and Data Collection Methods

Parent focus groups. WestEd staff held parent listening sessions that informed their development of protocols and surveys for the larger investigation of special processes and protocols. A total of 12 parent focus groups were held. Approximately 200 parents were invited to participate, and 70 parents participated across the 12 focus groups. Deductive coding was completed using a qualitative analysis software; the report does not specify the predetermined codes and which qualitative software (Bracco et al., 2015).

School visits. Fourteen schools were visited within SSD; six elementary, three middle, three high schools, and two special schools for students with multiple to profound mental or physical disabilities. During this visit the WestEd (Bracco et al., 2015) research team conducted focus groups with IEP teams and teachers and conducted classroom observations. Schools were selected in concert with district officials and the degree of representation across all grade levels,

special education service models, and demographic factors. At least one team spent a full day per school (Bracco et al., 2015).

Surveys. Parents, students, school administrators, teachers, related service providers, and paraeducators were surveyed by the WestEd (Bracco et al., 2015) research team. The surveys focused on the three areas of the study: (a) IEP development, (b) IEP implementation, and (c) IEP dispute resolution. The surveys varied in length, but all used a 4-point Likert scale to measure the extent of agreement: 1 (*strongly disagree*), 2 (*disagree*), 3 (*agree*), and 4 (*strongly agree*). The WestEd research report states that a do not know/NA option was also available; it was not a Likert item. Parental surveys were available online in English or Spanish and paper was available as well. Secondary students (Grades 8–12) whose parents were in the survey sample were eligible to complete the student survey, if their parent provided permission. The survey response rate was 10% for students and 3% for students. Paper surveys were available for parents who spoke other languages (Chinese, French, Korean, or Vietnamese). School staff only completed online surveys. The teacher response rate was 9% and it was 50% for school administrators (Bracco et al., 2015).

District interviews. Several district personnel were interviewed. For the most part they were individuals on the director level within the special education division for the district. The report does not provide a lot of information about this process (Bracco et al., 2015).

Document and data reviews. The WestEd (Bracco et al., 2015) research team reviewed 100 randomly selected IEPs to address multiple research questions. The random IEP review was proportionate to the number of parent surveys. Student test data from the district was also examined. State complaints and administrative law judge rulings were reviewed to help answer the research questions associated with dispute research questions. For contextual purposes,

budget documents and other documents related to special education services in the district were reviewed (Bracco et al., 2015).

Benchmarking. The WestEd research team also conducted interviews with school officials from other major districts in the Mid-Atlantic and South Atlantic regions. Efforts to conduct interviews with another larger school district in the same Mid-Atlantic state as SSD was unsuccessful. Each interview took approximately an hour to complete and followed a protocol established by the team (Bracco et al., 2015).

WestEd Research Foci

The WestEd (Bracco et al., 2015) study was investigating SSD's processes and services in three broad areas. The first was the development of IEPs. The second was the implementation of IEPs. The final area focused on the IEP dispute resolution process. Each area had its own set of research questions. The research questions for the entire study are being provided, but this paper is most interested in the ways that touch upon coteaching.

First Area of Focus: IEP Development

WERQ1A: How do we know that students who are struggling learners are appropriately referred for special education screening?

- What data is gathered/analyzed/utilized prior to the screening?
- What data is collected regarding the number of referrals made for special education screening and the outcome of the screening?
- What data is collected regarding next steps when a student is not eligible for special education services?

- How do we analyze and share data related to the identification of students with disabilities? How is this data disaggregated (i.e., by disability category, race, ethnicity, etc.).

WERQ2A: How do we assess the effectiveness of our system wide efforts to address disproportionality in special education referrals?

WERQ3A: How do we inform parents (and secondary school students) about the IEP determination process and available support?

- What information is shared with parents in advance of the referral for special education?
- How do we communicate regarding support available to parents such as through the Office of Community Engagement and Partnerships?

WERQ4A: What steps does SSD take to actively solicit parent/student input in the education eligibility process?

- How do parents get information about potential special education placements?
- What training is offered to staff members who participate in IEP meeting regarding the role of parents and how to solicit/value parental input?

WERQ5A: How do we assess the parent/guardian's experience of the IEP process?

- What feedback is collected from parents? How do we assess whether the IEP proves was collaborative-consist with our core values?
- How are parents informed about supports that may be of available for students who are not found eligible for special education services?
- How is the feedback collected from parents used?

WERQ6A: How does SSD assess whether IEPs are developed in accordance with IDEA?

Second Area of Focus: IEP Implementation

WERQ1B: What data is used to determine if students are places in the least restrictive environment in accordance with IDEA?

WERQ2B: What is the continuum of services that SSD provides to meet the needs of students with disabilities? How do we assess that this continuum meets the needs of our diverse population?

WERQ3B: What evidence is there that students are receiving services specified on their IEPs? To what extent does the provision of IEP services vary across schools?

WERQ4B: What measures are used to assess the academic progress of students with disabilities?

- What is the policy and practice related to reviewing student placements and progress?
- What evidence is collected at the system level regarding the percentage of students meeting IEP goals?
- To what extent does the implementation of IEPs vary across schools?
- How do we determine when a student is no longer eligible for special education services?

WERQ5B: What data do we collect on modification of special education placements, special education modifications of services, and on students exiting special education?

- Does IDEA allow the IEP to be changed without parent participation? If yes, how often does this occur?
- Do we monitor supports for students who are exiting from special education? If so, what does our data indicate about this support?

- How does SSD assess the effectiveness of our various staffing models (e.g., hours-based staffing, homeschool model, coteaching)?

Third Area of Focus: IEP Disputes

WERQ1C: What information do parents receive about dispute resolution processes?

WERQ2C: What steps does SSD take to encourage collaborative dispute resolution?

WERQ3C: How do we assess the parent/guardian's experience of the dispute resolution process?

- What feedback do we collect from parents?
- What do we do with the feedback collected from parents?

This study was quite broad in its investigation of SSD's processes and practices related to its special education services. However, the problem of practice focuses how special education and general education coteachers struggle to collaborate regarding instructional practices because of their lack of knowledge or training regarding the best practices of coteaching (Murawski & Swanson, 2001). The broad findings will be shared for readers understanding of the overall study however, there is an emphasis regarding how the results speak to the needs of coteachers.

Results

WestEd (Bracco et al., 2015) investigated the SSD special education processes and services within their special education department. The purposed was to identify their level of effectiveness and in regard to the critical areas for special education: IEP development, IEP implementation, dispute resolution, and consistency of special education services. This needs assessment, however, focused on the general education and special education teachers' perspectives as it related the collaborative instructional practices.

The WestEd (Bracco et al., 2015) report did not provide a response or answer for each research question. Instead, it provided a summary response for the respective area of focus. The highlights are provided as follows for each area of focus and the research questions are included as a reference point.

First Area of Focus: IEP Development

WERQ1A: How do we know that students who are struggling learners are appropriately referred for special education screening?

Broadly speaking, WestEd (Bracco et al., 2015) discerned that SSD provides a system of tiered supports to assist learners who are struggling in the general education setting. In particular, the collaborative problem solving (CPS) and educational management team (EMT). The CPS framework follows the plan-do-study-act cycle of change. A key component of this process is that teachers collaborate to monitor and adjust interventions based on student progress. The EMT is a "multidisciplinary school-based team with expertise in teaching and learning, problem-solving and interventions" (Bracco et al., 2015, p. 10). The CPS and EMT level of supports are valuable strategies for accommodating or modifying student instruction; however, the CPS framework and EMT meetings are discussions about student achievement. These conversations do not typically involve teacher conduct or colleague classroom relationship.

Under the auspices of the first section (IEP Development) there was a focus on professional development. Two things of note that might be of interest in relation to coteaching are the perceptions of how teachers (general and special educators) are trained to work with parents about the IEP process and teachers understanding of the IEP and the associated IDEA requirements. To the extent of working with parents regarding the IEP development, parents are given an IEP document five days before a scheduled meeting. This gives parents knowledge of

the IEP content before the meeting, so that any questions about the document can be discussed during the meeting. The general education teachers, however, learn about the IEP contents and process by attending the IEP meetings. This is because when general education teachers attend IEP meetings, they are speaking on behalf of the IEP student academic achievement in the classroom. In High School Z, there is no training offered to general education teachers regarding the IEP process, but general education and special education teachers may discuss a student's achievement before a meeting. Afterwards, this information is written into the IEP document by a special education teacher. Therefore, the special education teacher is the one who is responsible for crafting the IEP document and presenting the information during the IEP meeting.

Second Area of Focus: IEP Implementation

- WERQ1B: What data is used to determine if students are places in the least restrictive environment in accordance with IDEA?
- WERQ2B: What is the continuum of services that SSD provides to meet the needs of students with disabilities? How do we assess that this continuum meets the needs of our diverse population?
- WERQ3B: What evidence is there that students are receiving services specified on their IEPs? To what extent does the provision of IEP services vary across schools?
- WERQ4B: What measures are used to assess the academic progress of students with disabilities?

Overall, the second set of research questions were concerned with the IEP implementation process within SSD. IEP implementation is the provision of special education services to learners with IEPs, or how the IEP translates to the classroom instruction to ensure that the SWD accesses the curriculum. This section is most aligned with coteaching. One of the

types of services available for learners with IEPs is classroom support from paraeducators or special education teachers. These supports are governed by the mandates of Individuals with Disabilities Education Improvement Act which states that

> All children with disabilities to be educated with their nondisabled peers to the maximum extent appropriate. Furthermore, a child should only be removed from a general education environment if the nature and severity of the disability is such that education in a general education environment with the use of supplementary aids and services cannot be satisfactorily achieved. This is accomplished through the provision of special education services within the general education setting, to the extent appropriate, which is considered the least restrictive environment (LRE). (as cited in Bracco et al., 2015, pp. 30–31)

Therefore, in High School Z, SWDs are supported by special educators or paraeducators in the LRE.

The parents, building administrators and teachers supported the idea that students are placed in the general education classroom as the first option: Parents (85%, $n = 445$), school administrators (97%, $n = 227$), and teachers (93%, $n = 748$). While the data indicates that there is strong support that SWD are placed in the correct LRE, the data differed when asked about direct classroom support: school administrators (71%, $n = 227$) and teachers (77%, $n = 748$). Therefore, these numbers indicate that SSD has a strong district-wide philosophy for placing SWDs in the best LRE, however, the data indicates that there appears to be a lower rate of support for those students in the LRE. Thus, suggesting that SWD are not always getting the help they need in the classroom. Further supporting the notion that coteachers could benefit from learning about the coteaching best practices.

Third Area of Focus: IEP Disputes

- WERQ1C: What information do parents receive about dispute resolution processes?
- WERQ2C: What steps does SSD take to encourage collaborative dispute resolution?

- WERQ3C: How do we assess the parent/guardian's experience of the dispute resolution process?
    - What feedback do we collect from parents?
    - What do we do with the feedback collected from parents?

The final group of research questions investigated SSD's processes and policies around IEP disputes. This set of research questions focused on what SSD to address parental concerns regarding their children's IEP development or implementation. Eighty-seven percent of parents agreed that they were of their rights as the parent of a child with a disability. Sixty-five percent of parents surveyed agreed that district staff supported them in resolving a conflict related to their child's IEP. While these set of research questions was less connected to the problem of practice focused on coteaching within SSD, one recommendation from WestEd (Bracco et al., 2015) focuses on professional development for district staff aligned with data on the types of disputes resolution practices and ways to better partner with students' families. Depending on the reasons for the disputes and the strategies employed to resolve them there might be connections made to coteaching practices employed by SSD general and special education teachers.

Discussion

The problem for the case study focuses on how general education and special educations coteachers struggle to work together regarding instructional planning and practices when they lack information regarding the coteaching best practices. The larger WestEd (Bracco et al., 2015) study investigated three major areas: (a) IEP development, (b) IEP implementation, and (c) IEP disputes. The next section of the paper discusses key WestEd findings related to coteaching within SSD.

WestEd (Bracco et al., 2015) provided a few recommendations in regard to IEP implementation. According to SSD, the first one stated that that SSD "should collect information to assess the extent to which the schools use the Guide to Planning and Assessing School-Based Special Education Programs and provide professional development to ensure that schools are using it effectively" (p. 44). The purpose of the guide to assist individual school improvement teams to engage in continuous improvement of special education services and delivery. While this recommendation does not directly relate to the coteaching partnership, it is a reminder that schools can benefit from providing staff information about a special education service delivery, such as coteaching, so that they are aware of the district's policy, practices and procedures.

The second recommendation stated that SSD should develop a more systematic process to monitor and improve the services and delivery provided to SWDs and assess the staff models. "While school staff continuously assess staffing levels to ensure students receive services, there is no process to understand how models such as co-teaching work or improve outcomes for students" (Bracco et al., 2015, p. 44). SSD uses the professional learning community (PLC) framework for teacher instructional collaboration and planning; therefore, using the PLC structured time to gather data regarding coteacher instructional planning and practices could provide SSD with information to better understand this model is working for the benefit of teaching and learning. Desimone (2009) said, "professional development should be aligned with state and district's goals and standards for learning and should also involve opportunities for collaboration so that teachers can learn from each other" (p. 184).

The third recommendation stated that SSD should provide opportunities for the teacher to discuss and implement strategies for parent communication regarding the services in the IEP. According to SSD, "Since information sharing is dependent upon the teacher and practices vary,

it would be most productive for good communicators to discuss the best practices with their colleagues" (p. 44). The implication of this recommendation is that teachers need time to communicate regarding special education processes and services to provide accurate and appropriate information to parents and students. This recommendation supports the idea that coteachers need opportunities for discourse. Friend and Cook (2007) states that common planning time allows for improved communication between the general education and special education coteachers. The focused conversations, during a PLC, helps a general education teacher to better understand the SWD's academic needs as well as the special education processes.

The last recommendation states that SSD needed to explore ways to increase collaboration between general education teachers and special education teachers. Survey results indicated that while most teachers collaborated, the level of collaboration needs improvement. This last recommendation is the crux to why the researcher wants to conduct a study to better understand coteacher instructional collaboration. One of the best practices of coteaching states that coteachers need training prior to entering the classroom to understand the methods and necessary skill before teaching (Kohler-Evans, 2006). Couple this training with consistent PLC opportunities gives coteachers the time for structured conversations and reflections regarding collaborative instructional planning. Based on the WestEd (Bracco et al., 2015) recommendations and key literature, teachers that work with SWDs need professional training regarding best practices for special education processes and service delivery models such as coteaching, as well as opportunities for collaborative instructional planning to establish and maintain a successful coteaching partnership.

Conclusion

The WestEd (Bracco et al., 2015) review and its recommendations for SSD aligned with the literature and supports the notion of providing structured time and opportunities for discourse regarding collaborative instructional practices. The literature investigated related to the problem of practice help to identify five key factors (see Figure 1) that impact coteaching. They are (a) the knowledge of the general educator, (b) the knowledge of the special educator, (c) having common planning time, (d) teacher behavior and beliefs, and (e) professional development. Professional development will be a key focus of the literature review focused on coteaching interventions in the next chapter.

Chapter III

Intervention Literature Review

Empirical Support for Coteaching as an Instructional Strategy

Coteaching is a method of instructional delivery whose effectiveness has yet to be examined in a large-scale, controlled study using quantitative measures (Arthaud, Aram, Breck, Doelling, & Bushrow, 2007). While it appears beneficial, its actual impact on academic achievement remains largely unknown (Scruggs et al., 2007). There needs to be an investigation of collaborative teaching as it impacts the whole school culture, and support in the professional development (Gerber & Popp, 1999). However, any significant change in the instructional process requires the buy-in of administrators and teachers and the flexibility to adapt (Gerber & Popp, 2000). Without their collective support, increases the chance of an ineffective program. Therefore, the collaborative teaching process requires stakeholder participation and support to be successful.

Given this information, schools should continue to move forward using observations, experiences, and outcome measures to accumulate information on the effectiveness of a collaborative teaching model (Tapasak & Walther-Thomas, 1999), especially within the high school setting. Enlisting these methods to substantiate the need for collaborative teaching of general education and special education pairs could prove productive. In addition, administrators should include professional development programs within districts and individual schools on the coteaching model to examine and expand their methods of garnering active involvement of all stakeholders in the special education process (Arthaud et al., 2007). Coteaching not only benefits the teacher's personal and professional growth, but it also impacts all the stakeholders (Friend et al., 2010). Because of this, it is important to continue to research the strengths and weaknesses of

collaborative teaching, and this literature review provides substantive information to support the proposed intervention.

Administrative Support

Administrative support is a key factor to establishing and maintaining a successful coteaching partnership because principals are highly influential in shaping the school culture, vision, and enlisting systemic change (Gerber & Popp, 2000). Given their position and power, administrators who understand coteaching methods and inclusion adjust teachers' schedules, consider room assignments and provide adequate resources and training (Barnett & Monda-Amaya, 1998). Supportive administrators are proactive and report formally to the faculty, parents, and the community regarding ongoing improvement (Gerber & Popp, 2000). More importantly, a supportive administrator does not mandate a teacher to coteach but asks for voluntary participation (Barnett & Monda-Amaya, 1998). This leader is the primary collaborator and understands the importance of working with the staff by inquiring, not requiring.

Gerber and Popp (2000) interviewed administrators, special education teachers and general education teachers from seven school districts in the southwest region which included four elementary, four middle and two high schools. The results concluded that teachers valued administrators that allowed them to have a choice to coteach. They felt that it was important to volunteer as opposed to being told. Also, teachers that chose to coteach voiced the need for administrative support with scheduling mutual instructional planning. However, administrators stated that sometimes scheduling coteachers with the same planning time is a challenge (Gerber & Popp, 2000). In the previous example, while it may appear that principals and assistant principals do not support coteachers, sometimes creating mutual planning periods does not work with the school schedule. In Scruggs et al. (2007), a third-grade teacher reported, "'the co-

teachers must be committed, but administration must also be committed to creating a schedule that supports the needs of facilitating a co-teaching model'" (p. 96). Building-level administrators may not be directly involved in the day-to-day aspects of coteaching, but their decision making and support are extremely important. Because of this, Thousand, Villa, and Nevin (2006) found that when teachers describe their perspective on administrative support they offer five dimensions: a school-wide vision for an effective inclusion program, skills to implement inclusive practices as well as knowledge of partnering of coteachers, understanding of resource needs, willingness to provide incentives, and an action plan with goals and objectives. These dimensions suggest that coteachers want an informed instructional leader who acknowledges their efforts and provides opportunities or incentives for them to develop as professionals. Given these parameters, a knowledgeable administrator who understands the components of coteaching can provide ample support for coteachers to facilitate success (Barnett & Monda-Amaya, 1998). Coteaching is professional partnership that may help all learners; however, for this to happen they will need administrative support.

Paraeducator Support

Paraeducators can offer support to the coteaching partnership by assisting both the teachers and students within the classroom (Villa et al., 2008). Coteachers can maximize the student to teacher ratio when a paraprofessional is present (Salazar & Nevin, 2005). They can differentiate instruction for a small group of students as well as work on a one-to-one basis, and there is added value to their presence in the classroom (Villa et al., 2008). Rueda and Monzó (2002) conducted a study in two large school districts in Southern California and discovered that when the paraeducators were from the same areas as the bilingual students that they were able to

help the students activate prior knowledge by speaking in their native language. This example illustrates how paraeducators can support learning.

However, in another study, Downing and Peckham-Hardin (2007) interviewed 23 high school coteachers and 17 paraeducators on the benefits of a coteaching. Specifically, the paraeducators noted that while they enjoyed working alongside the teachers and students, that they would be more useful if they received the same professional training as the teachers. Breton (2010) stated that "special education has developed a service delivery model that depends heavily on relatively untrained, underpaid, and devalued staff members to provide complex instructional and behavior programs to some of the most challenging students" (p. 64). Paraeducators could benefit from an in-service professional development, and instructional trainers would provide goals and objectives of collaborative teaching, effective strategies for instructional presentations, successful behavior management techniques, ways of establishing parity of roles and responsibilities and conflict management (Pancsofar & Petroff, 2013). While there can be numerous benefits to having paraeducators in class, their role does delineate from serving as a coteacher. Therefore, it is important for them to establish roles from the onset of working together and having this type of knowledge would better prepare them to assist a coteacher and students.

Professional Development

School districts provide teachers opportunities to advance their knowledge and skills through professional development (Shaffer & Thomas-Brown, 2015). Professional development is an approach that provides teachers additional training to meet specific subject content standards and expectations using strategies through evidence-based practices (Bruce et al., 2010) that occurs through workshops, in-services, online chat rooms, study groups, discussions,

lectures, research projects, and graduate study (Wiggins & Damore, 2006). Effective professional development includes a focus on content that closely matches the student and teacher needs; active learning process involving analysis, discussion, feedback or observations; coherent with the school, district and state reforms and policies; minimum of 20 contact hours spread over a semester; collective participation with groups of teachers that teach the same age, grade, or subject to promote an interactive learning community and an opportunity to follow up with the teachers (Guskey & Yoon, 2009). Professional development occurs in multiple ways and each aspect is necessary for effectiveness; but, addressing the programs framework allows participants to better understand the meaning and purpose.

> The professional development framework addresses
>
> > The impact and influence on teacher and student outcomes, the change or impact on teachers' knowledge, skills, attitudes and beliefs, teachers use of new insights, skills, attitudes and beliefs to improve instruction and the instructional change that impact student achievement. (Desimone, 2009, p. 183)

Included in this conceptualization of professional development is the adult learning principle which states that adults learn best when they can plan, implement, and evaluate their learning; seek knowledge that relates to their situation and helps them address current challenges; prefer collaborative approach to learning that involves sharing ideas and perspectives (Murray, 2014). High-quality professional development (is that which results in improvements in teachers' knowledge and instructional practice (Wei, Darling-Hammond, & Adamson, 2010). According to Desimone (2009), professional development occurs in various forms, such as coteaching, mentoring, lesson reflections, group discussions of student work, teacher network or study group Whatever the method of choice, professional development is a venue in which teachers facilitate substantive discussions and observations about teaching and learning that produce pedagogical changes.

Coteacher Professional Development

While shared planning time assists in unifying coteachers with instructional planning and implementation, training offers information that support the best practices for coteaching (O'Shea et al., 1999). Collaborative teachers need training before entering a classroom to understand the methodology to ascertain a set of prerequisite skills before working in an inclusive classroom (Kohler-Evans, 2006). Professional development experiences that employs observable strategies that relate to the expectations of an inclusive classroom and collaborative partnership increases coteacher participation and effectiveness (Fennick & Liddy, 2001). Teachers new to coteaching need professional development to understand the many features of collaborative teaching and to build a knowledge base with a repertoire of skills and supports (Gerber & Popp, 2000). When this happens, they can access the necessary tools to empower and support their coteacher and students. However, when professional development is absent, and teachers from different disciplines try to work as a team, their unrelated educational preparation may cause conflicting expectations (Chanmugam, 2013). "Much of the current teaching workforce has had little preparation for coteaching roles. The implication is that high-quality professional development should be accompanied by coaching and other supports demonstrated to change teacher practice" (Friend et al., 2010, p. 15). The original plan of collaborative teaching involved the general education teacher as the primary instructional leader and the special education teacher acting as an assistant (Friend & Cook, 2007). This was when there was a limited amount of information about how both teachers were expected to teach in the same room, at the same time. Now, the expectation is for both teachers to function as instructional facilitators to all students (Friend et al., 2010).

In a meta-analysis with over 454 coteachers, the results indicate administrators, teachers, and students perceive the model of coteaching as beneficial; but teachers comment that effectiveness happens with enough training (Murawski & Swanson, 2001). Scruggs et al. (2007) metasynthesis on coteaching outlines the need for training to promote strategies and skill development of different coteaching models, understanding of various disabilities, instructional planning strategies and interpersonal communication. In some cases, teachers attend professional development sessions before coteaching, but this is not true for every co-pair (Hamilton-Jones & Vail, 2014). Fennick and Liddy (2001) found that special education teachers are more likely to attend professional training during preservice as compared to the general education teachers. One coteacher report of being trained in general education, not special education and, as a result, had feelings of inadequacy when expected to teach with a special education teacher (Cramer & Nevin, 2006). As cited in Scruggs et al. (2007) a high school general education teacher says,

> "I felt unprepared for collaborative teaching. I was frightened. I had no background. I was afraid that I would hurt somebody. A special educator had the same feelings; I did not know the curriculum, and I was scared that the general education teacher would think that I was not capable." (p. 400)

The previous quote shows that despite the teacher's role, both general education and special education teachers report feeling unprepared. Scruggs et al. found that teachers report "an ongoing need for training that includes strategies and skill development that is unique to co-teaching" (p. 395). Pancsofar and Petroff's (2013) study of 129 Mid-Atlantic coteachers revealed that when teachers have more opportunities for coteacher training, they feel confident in their ability to coteach, have more interest and a positive attitude towards coteaching which allows both teachers a chance to learn from one another. Leko and Brownell (2009) study shows that "teachers acknowledge a need to improve their practice for students with disabilities; however, the school-wide professional development efforts have failed to meet their particular needs" (p.

64). When professional development fails to meet the needs of the instructional staff, it impacts both teachers and students (Garet. Porter, Desimone, Birman, & Yoon, 2001).

Providing coteacher training is critical to implementation, maintaining and sustaining a viable partnership (Miller & Oh, 2013). Such that, inclusive teaching and collaborative practices are within the teacher education standards. For example, the National Board for Professional Teaching Standards (2016) requires teachers to show multiple methods to engage in student learning and to enable students to reach goals and requires teachers to work collaboratively with others by being a part of a learning community. According to B. Cook et al. (2014), the Council for Exceptional Children standards include competencies related to knowledge and skills in understanding characteristics of learners with cognitive, physical, cultural, social and emotional needs and expertise centered on communication and collaborative partnerships. The professional benchmarks of the National Board for Professional Teaching Standards and Council for Exceptional Children reveal that working together for the benefit of student learning is a necessity and districts should provide quality professional development opportunities to coteachers, but this is not always available.

Teachers reveal that when they attend professional development sessions, there is a lack of continuity between the application, the utility of the information, and follow-up support (Garet et al., 2001).

> Many in-service experiences are limited in their relevance and often leave teachers in an isolated position whereby the information is conceptually and practically far removed from the classrooms. One teacher report, I learned a lot of new strategies in training, but when I returned to the classroom, I felt a little lost. I did not know exactly which strategy would work with my lesson. (Burbank & Kauchak, 2003, p. 64)

In other words, the information is ambiguous and not applicable to their context, leaving teachers with conflicting feelings about attending future professional development sessions for fear that the experience will be the same.

In many school districts, educators attend professional development sessions outside of their school building to learn about innovative programs or new approaches to instruction (Bruce et al., 2010). While there is value in attending, traditional professional development separates learning from natural settings. Webster-Wright (2009) states, "Professionals learn from experiences and that learning is ongoing through active engagement and practice" (p. 723). Because it was difficult to sustain active participation and practice during a one- or two-day conference, one method to mitigate the challenges is to embed the professional learning through experiences and practices in context (Bruce et al., 2010). Therefore, teachers learn within their professional context to apply what they learn in real time.

The components of an effective coteaching partnership include training for all stakeholders involved in the process, such as general education teachers, special education teachers, paraeducators, department chairpersons and administrators (Miller & Oh, 2013). Including literature on administrators and paraeducators is important because. In some educational contexts, paraeducators support the SWDs in the mainstream class as opposed to a special education teacher and administrators at every school level need to be knowledgeable regarding coteaching best practices as well as the significance of their role. In regard to this intervention, the professional development focuses on coteaching partnership between the general education and special education teachers. Based on SSD's research protocol for doctoral students, this study needed to be compact in its focus and not interfere with exiting practices or

protocols. Therefore, it was not feasible to include administrators or paraeducators as possible participants in the dissertation study.

Teacher Efficacy

Bandura's (1982) theory of self-efficacy can be used to explain teacher behavior in the classroom and teacher performance which proposes that performance and motivation are determined by how effective people believe they can be. Teachers comfort level with content subjects helps to inform how comfortable they are in teaching that subject and, therefore, how likely they are to teach that subject effectively (Riggs & Enochs, 1990). Tschannen-Moran and Hoy (2001) work also exemplifies that when teachers have more knowledge in a area, they are more comfortable when engaging in instructional pedagogy. Therefore, teacher efficacy is a teacher's belief in his or her ability to positively impact how students learn (Henson, 2001). When teachers feel more efficacious about what they are teaching, then they are more likely to engage in instructional activities, but if they do not feel confident (or less efficacious), then they are less likely to support students with their instructional activities (Schunk, 2008).

Teacher efficacy relates to collaborative teaching because when a general education teacher and a special education teacher are expected to teach together, an individual's efficacy can either hinder or support the collaborative process. For instance, Schunk (2008) reported that teachers with higher efficacy levels are more apt to plan engaging lessons and interact with students to encourage their participation in the lesson. They are also more likely to use varied strategies to meet the needs of their students and are less likely to refer a difficult student to special education (Almog & Shechtman, 2007; Nunn, Jantz, & Butikofer, 2009).

Teacher efficacy determines the likelihood that a teacher provides the desired level of expected outcomes such as incorporating appropriate response intervention strategies to help

support struggling students (Wolters & Daugherty, 2007). Because conditions in school settings continually change, a teacher's level of efficacy may vary from one class to another (Ross, 1994). Bandura's (1993) self-efficacy theory provides the framework for the development of teacher efficacy in the context of the collaborative partnership. Interactions with persons with the environment stimulate development processes and promote cognitive growth (Vygotsky, 1997). Coteachers can share and work together to accomplish goals (Dettmer, Thurston, & Dyck, 2005). Therefore, teacher efficacy provides a framework to support the notion that when high school general education teachers and special education teachers are adequately prepared with the knowledge and skills of best practices of coteaching the result is increased efficacy and collaboration.

How Teacher Efficacy Changes

Bandura's (1977) four sources of self-efficacy suggest that what we believe impacts the outcome: mastery experiences, vicarious experiences, verbal persuasion, and physiological state. Mastery experiences lend to increased self-efficacy in that if one masters or achieves a task, then he feels more confident or successful regarding that activity. Vicarious experiences, however, states that efficacy improves by watching others who are successful at a sustained activity. Perhaps by watching someone be successful at a similar activity tells the person that if they can do it, so can I. Self-efficacy as it relates to verbal persuasion indicates that a trusted person's words can persuade you to believe that you can master an experience. Lastly, a person's physiological state can impact efficacy in that a person's emotional condition can enhance or impede their performance. For instance, a person's stress level impacts how well the task is performed. Overall, each efficacy experience can have a positive or negative impact on one's ability to achieve a task. Relating to coteaching, teachers will have opportunities for both

mastery and vicarious learning (Bandura, 1977). There will be instances when one teacher may learn a new skill by watching the other teacher. Also, after working together for a semester, the teachers will share mastery examples with one another to support their teaching practices. Both scenarios lend to verbal persuasion in that, one teacher affirms another with positive praise or approval because working with another teacher is not an easy task, so any amount of positive experiences they share, and witness is likely to improve how they feel about working with one another (Bandura, 1977).

Job-Embedded Professional Development

Job-embedded professional development (JEPD) is professional learning that occurs during daily practice within the teachers' professional context and JEPD connects research to practice that allows for teacher involvement in cooperative, inquiry-based work (Croft, Coggshall, Dolan, & Powers, 2010). A direct connection exists between a teacher's work in the classroom and their professional training when it is genuinely JEPD (Croft et al., 2010). Pancsofar and Petroff (2013) report a change in attitude, interests, and confidence, for 129 teachers, after receiving in-service professional development. Also, Ploessi and Rock (2014) used both professional training and e-coaching, a supportive form of training that was delivered through a bug-in-ear technology, to provide coteachers instant feedback during classroom instruction. As a result, 50 coteachers reported an improvement in their instructional performance. Both studies reveal that through JEPD, coteachers learn new knowledge and skills that change their mindset and instructional practices. Shaffer and Thomas-Brown (2015) results concluded that when social studies coteachers attend coteacher professional development that include peer observations, daily debriefs, both the general education teacher and special education teacher report enjoying working together and learning from one another: "Teaming

teams were required to meet at the end of the day to debrief, plan, and modify instruction to establish each person's perspective and possible modifications that may be deemed necessary" (p. 120). Using the same methods as Shaffer and Thomas-Brown, math coteachers participated in a PLC where they coplanned, coinstructed and debrief daily. After one year, coteachers reported a change in the instructional planning and practices as well as an improvement in student achievement (Bruce et al., 2010). Using the methods that involve active teaching, observing and debriefing regarding instructional practices, positively impacts teaching.

The JEPD model allows teachers to learn on the job by asking questions, communicating ideas, expressing concerns and receiving feedback as it relates to their context and occurs within various formats, such as across departments, grade levels, or teacher teams (Venables, 2011). There are many ways to offer JEPD. It can be facilitated using (a) action research, (b) case discussions, (c) coaching, (d) critical friends' groups, (e) data teams/assessment development, (f) examining student work/tuning protocol, (g) individual professional growth/learning plans, (h) lesson study, (i) mentoring, (j) portfolios, (k) PLCs and (l) study groups (Shaffer & Thomas-Brown, 2015). However, for learning to occur, Croft et al. (2010) recommends that JEPD be grounded in theoretical knowledge-based actual events, self-directed and essential to the teacher, and build upon preexisting knowledge. Teachers must be willing to collaborate through dialogue, sharing of instructional plans, and student data as well as conflict resolution, problem-solving strategies, and team building (Venables, 2011). Therefore, by situating learning at work, JEPD allows teachers to apply new knowledge or implement a strategy and receive direct feedback.

Waitoller and Artiles (2013) review of professional development reports that "to enhance teachers' capacity to respond to diversity through collaboration and active involvement needs evidence-based inquiry in their schools" (p. 325). When this happens, teachers are more

confident and reliant on inquiry to support student learning, collaboration increased, teachers became more open to being observed and peer feedback and they appear to have a more positive attitude to their students (Waitoller & Artiles, 2013). Studies have shown that the combination of teachers sharing their personal knowledge and receiving essential feedback comprises effective professional development (Bryant, Linan-Thompson, Ugel, Hamff, & Hougen, 2001). Personal knowledge includes experiential knowledge which develops as a result of teachers' experiences and interactions with colleagues through professional dialogue (Murawski & Swanson, 2001). The conversations that teachers have during the school day serve as a catalyst for professional learning. Therefore, it is critical for teachers to have time together to get feedback about a lesson that did not go as planned or insight on a student that is struggling academically and the JEPD approach offers teachers time during the school hours to solicit advice or feedback on their teaching experiences (Shaffer & Thomas-Brown, 2015).

Croft et al. (2010) relates JEPD to Vygotsky's sociocultural theoretical framework that proposes that social interactions and discourse play a significant role in learning. Working with colleagues removes the isolation factor, such as a teacher developing instructional plans and activities independently and allows teachers to capitalize on the cooperative learning context to support their effort in learning new things (Rytivaara & Kershner, 2012). The iterative process of learning through practice helps to improve instructional performance and, provides teachers an avenue to broaden their knowledge and skills regarding best practices of coteaching to use in an inclusive education classroom (Hunzicker, 2012).

PLC: Discourse and Reflection

Dieker and Murawski (2003) report that collaborative teaching has a positive impact on student achievement, however, this occurs when coteachers share common instructional planning

time, communicate openly, use various instructional practices and receive proper training. While the traditional role of professional development involves one person feeding information as participants passively sit, the active stance of professional learning activities requires collaboration, communication, and participation (Garet et al., 2001). Therefore, daily interaction is essential for both the general education and special education coteachers. But, when two teachers have different instructional planning times, finding time is a challenge (Shaffer & Thomas-Brown, 2015). Having a chance for focused and reflective conversations during a PLC provides coteachers an avenue to discuss current teaching methods, question routines, examine paradigms and solicit feedback in a supportive environment (Hadar & Brody, 2010). DuFour (2004) presents a PLC process that should encompass ongoing dialogue, opportunities for reflection, systematic action and engagement of participants that supports professional learning. Therefore, providing PLC time for coteachers to work together promotes a collaborative culture to enrich one's professional growth and learning to impact student achievement (DuFour, 2004).

When professional development is nonexistent for general and special educators, general educators report feelings of frustration and tension because of the special educator's lack of content knowledge and inability to facilitate the lesson (Isherwood & Barger-Anderson, 2008). While special educators are experts at modifying instructional activities, implementing these strategies are useless if the general education teacher does not support or understand the special educator's position in the classroom therefore, discussions during a PLC aids in improving communication(Villa et al., 2008). For example, Hadar and Brody (2010) describe "a strong PLC as one that empowers teachers to take responsibility for effective instruction" (p. 1643). If coteachers use the planned time to work out indifferences or misunderstanding, then there is less rhetoric regarding classroom positions and responsibilities. Solis et al. (2012) report that

coteachers are more satisfied when they establish roles and responsibilities before teaching together. During the PLC discussions, coteachers need to outline their roles and responsibilities, negotiate differentiation of instructional activities, and discuss which coteaching methods to implement well before entering the classroom to teach students (Thousand et al., 2006). With this continuous dialogue, certain instructional practices become a part of their methodology, So that over time there is a fusion with their teaching practices, language, and overall affect toward instructing students (DuFour & DuFour, 2010). With proper implementation and the sustained support that a PLC offers, both teachers stand the chance of learning new knowledge, skills, and strategies to change their attitudes and beliefs about working together to teach students (Venables, 2011).

An effective PLC includes a team of teachers working together to improve instruction and student achievement, but there are also other stakeholders responsible for successful implementation, including the principal, assistant principal and PLC leader (Venables, 2011). The principal serves as the school's primary instructional leader, and his position alone sets the tone for acceptance.

Principals must be 100% committed to making effective PLCs at their schools a top priority. Most every other district initiative and most other programs being implemented at the building level can be done within the framework of PLCs. PLCs are not an add-on to already full plates; they provide the structure for effectively dealing with most of the other stuff on the plate. Principals must embrace this notion (Venables, 2011).

Because a PLC becomes a part of the culture of collaboration, assistant principals also serve an important role because they, too, must invest in the PLC. When teachers believe it is a top-down decision that is not readily supported by the administrative team, then they are more

likely to sabotage the PLC efforts or worse dismantle any signs of progress (Venables, 2011). Therefore, assistant principals need to be on board to building a community of collaboration. A PLC leader serves as the facilitator during and, sometimes, after the meetings.

> Coaches are charged with the challenging task of keeping the PLC moving forward, constantly weighing the needs and readiness of the group, with the needs and readiness of individual team members. Coaches walk the fine line between uniting the group and pushing members to ask and answer the hard questions of each other that are inherited in any honest and authentic dialogue revolving around student learning. (Venables, 2011, p. 17)

Even in schools that sanction collaboration, some employees equate collaboration with congeniality and focus on building group camaraderie while others organize into teams that review the discipline policy, technology, wellness committee or social climate (Venables, 2011). All these activities serve a useful purpose; however, none represents the high-feedback dialogue that changes a school into a PLC. In High School Z, teachers that instruct the same subject and grade level meet as a PLC team on a weekly basis for an hour of instructional planning which is a standard practice for teachers in SSD. For this intervention, however, one pair of ninth-grade social studies coteachers have agreed to meet once a month for an hour for a reflective dialogue regarding their coteaching practices. While the ninth-grade social studies teachers meet as a PLC team, their conversations center around instructional planning and grading specifically for social studies content. The coteacher PLC promotes dialogue regarding their coteaching practices as it relates to their collaborative instructional planning and presentation.

Conceptual Framework

The conceptual framework, created for this study (see Figure 2) illustrates how a JEPD (Croft et al., 2010) model will facilitate professional learning focused on coteaching practices through dedicated collaborative planning and reflection (Venables, 2011). By utilizing High School X's existing PLC structure and dedicating weekly time to, collaborative planning, and

reflection it is hoped that the coteaching practices become a part of the coteachers' daily interactions within the professional context (Croft et al., 2010). The utilization of JEPD helps to foster a direct connection between research to practice by allowing teachers to make connections between their professional training and the classroom (DuFour, 2004). Therefore, utilizing the existing PLC structure helps to provide an avenue for the general education and special education teachers to come together for focused and structured conversations that supports questions and solicits feedback with a collective purpose of learning to promote a collaborative atmosphere.

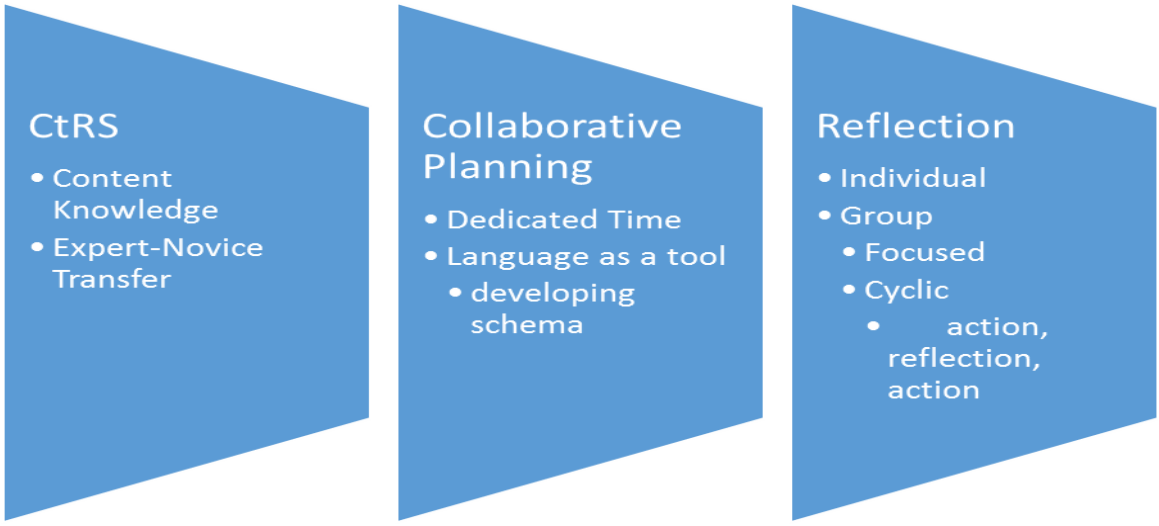


Figure 2. Harris's conceptualization of effective job-embedded professional development to support high school coteacher's efficacy and instructional practice.

Conclusion

The problem of practice focuses on how a general education and special education coteacher struggle to work together based on limited training and knowledge of coteaching

practices (Nevin, Thousand, & Villa, 2009). In addition, the researcher's years of coteaching experience, the literature on coteaching and the SSD WestEd (Bracco et al., 2015) special education review outlines the need of providing training as well as opportunities for collaborative instructional planning (Friend & Cook, 2007; Murawski & Hughes, 2009). Therefore, these factors support the necessity of providing a JEPD through a PLC that allows focused and reflective conversations that supports collaborative instructional planning.

Chapter IV

An Intervention to Support Coteacher Collaboration

In a regular education classroom that contains general education students and SWDs, the instructional process is often facilitated with coteachers, whereby both general education and special education teachers work together for the benefit of student learning. Data from a student education study conducted within SSD (Bracco et al., 2015) suggested professional development around a variety of topics or practices within SSD to better achieve its goals related to special education services. Based on the districtwide report (Bracco et al., 2015) and my investigation of the literature focused on coteaching, there are limited large data sets that empirically investigate coteaching. In the SSD high school, per the district policy, a PLC structure already exists, but there is no specific focus on coteaching nor any dedicated coplanning time for the purpose of supporting general educators and special educators in their implementation of coteaching practices. Therefore, this intervention provides coteacher's structured opportunity for discourse and reflection on their collaborative practices within an existing PLC.

Rationale for Intervention Focused on PLC Supporting Coteaching

Based on the existing literature, the WestEd (Bracco et al., 2015) report prepared for SSD, and my professional experience working as a high school special education teacher in SSD for over 20 years, there is room for improved professional development and collaborative instructional planning time for general educators and special educators serving as coteachers. As part of the district's larger instructional plan, SSD uses a PLC model for instructional planning and support for content area teachers. Since the PLC is a living practice at SSD it is feasible to have an intervention that occurs within the existing PLC process. The intervention focused on how collaborative planning and reflection supports the best practices of coteaching.

In SSD, the current PLC practices require educators to meet consistently to collaborate and discuss instructional planning, practices and student achievement. The WestEd (Bracco et al., 2015) report showed that only 62% (n = 747) of teachers stated that they coplanned together. In my current professional experience at an SSD high school, special education teachers often say they do not participate in the instructional planning phase of a lesson. As such, SSD subscribes to DuFour and DuFour (2010) working definition of a PLC which states that it is an ongoing process in which educators work collaboratively recurring cycles of collective inquiry and action research to achieve increased student achievement. Therefore, the study aimed to situate learning at work by actively engaging coteachers with genuine problems in their professional practice through the school's existing PLC structure (Boud & Middleton, 2003).

This study was further supported by the rationale of JEPD which connects research to practice that allows for teacher engagement using their work in the classroom with on-the-job training and support (Croft et al., 2010). Therefore, this study was designed to describe how the coteaching relationship between the special education and general teacher pair may be influenced by structured discussions focused on planning, collaboration, and reflection. This study was guided by the following research questions:

1. How does the use of the Coteaching Rating Scale influence ninth-grade social studies coteacher's instructional planning?
2. How does reflection within PLC coteaching sessions influence coteacher's reported instructional collaboration practices?
3. What is the impact of a PLC focused on coteaching for ninth-grade social studies and special education teacher's self-efficacy?

4. How has the study implementation adhered to or differed from the proposed implementation procedures?

Research Design

This study is based on case study methodology in which, Yin (2018) reminds us that case study methodology must be rigorous and involves a need to understand any social phenomena within a real-life context. This study used an explanatory case study design to describe how focused collaborative planning and reflection, during a PLC, supports coteachers' instructional practices (Yin, 2018).

An explanatory case study design was used for this study due to the relatively small sample size of coteachers. There was one general education teacher and one special education teacher, which resulted in one single case (Yin, 2018). Six participants were asked to participate in the study, but only two consented. According to Yin (2018) there are several types of rationales for choosing to implement a single case study design. Yin defines common rationale as "the ability to capture the circumstances and conditions of an everyday situation because it may provide lessons regarding social processes related to some theoretical interests" (p. 50). In this context, the common rationale type of single case design was used to encapsulate how coteaching pairs utilize coteaching strategies and reflective practices in the context of a PLC to support their collaborative planning and instructional pedagogical practices. The relatively small sample size of participants, one pair, triangulation of data (document review, focus group, Coteaching Rating Scale [CtRS], researcher's journal) and the limited availability of time to work with the coteachers were factors that contributed to the common rationale of how fairly large complex high schools operate and why an explanatory case study design is a good fit for this study.

The qualitative data collection used document review, focus group data and the researcher journal notes to help answer the research questions focused on how a PLC supports ninth-grade social studies coteachers' collaborative instructional practices and may influence their beliefs. The qualitative data drew upon the ninth-grade general and special education social studies teachers' experiences with discourse and reflection within the PLC sessions. According to the SSD WestEd (Bracco et al., 2015) report more professional development opportunities were recommended for teachers within SSD in support of meeting its goals around special education services. Therefore, the purpose of this single case study is to explain how a concentrated opportunity for dialogue and reflection supports coteacher collaborative instructional planning and teachers' self-efficacy.

Process Evaluation

In Dusenbury, Brannigan, Falco, and Hansen (2003), the fidelity of implementation involves (a) adhering to the program, (b) dosage or the amount of the program delivery, (c) quality of program delivery or the way the teacher implements the program, (d) participant satisfaction, and (e) program differentiation. In this study, one aspect of fidelity involved recruiting program participants. Originally, the intended participants were the three social studies coteaching pairs in High School X where the researcher is employed. Due to district constraints about where a doctoral study could take place and the emphasis on one grade band (9th) there were three potential coteaching pairs. As stated previously, there was one coteaching pair that agreed to participate in the study.

In the study a high level of participation consisted of all three pairs consenting to be in the study, medium participation was two pairs consenting and low participation was one pair consenting to be in the study. There was a possibility of recruiting three co-pairs or six teachers,

but only one pair agreed to participate. As a result of only having two teachers for this case study, there was low participation based on the overall pool of potential participants.

Once they committed, consistent attendance was a core component in establishing a PLC (Venables, 2011) and being present to engage in the identified content. For this study, coteachers were expected to meet with the researcher once a month beginning in August 2018 and ending in January 2019. Regarding establishing fidelity related to attendance or dosage, high attendance was five out of six sessions, medium attendance four out of six and low attendance is three or less. The district's requirement is that teachers attend a PLC meeting once a week from September to June. The participants of this case study met with the researcher once a month, from October 2018 to January 2019. The one pair attended all five PLC sessions and the focus group s and the definition of high attendance or dosage was met for the study. The change in the timeframe was a result of the SSD IRB protocol which does not allow study implementation during the first month of school.

The fourth research question focused on overall process: how has the study implementation adhered to or differed from the proposed implementation procedures? To answer this question the researcher reviewed the notes from the PLC, entrance tickets and exit slips, and researcher journal notes to determine (a) program adherence, (b) dosage or the amount of the program delivery, (c) quality of program delivery and/or the processes used, (d) participant satisfaction, and (e) if any program differentiation occurred. The findings will be provided in the next chapter.

Outcome Evaluation

A single case study explanatory design allowed for understanding a social phenomenon in a real-life context (Yin, 2018). In this instance, a single case study and the explanatory design

is used to better understand how a focused opportunity for dialogue and reflective practices supports the instructional collaboration and efficacy of general and special education coteachers at High School X. This design helped capture experiential information to answer the research questions regarding how the CtRS (Gately & Gately, 2001) assessment influences their instructional planning, how does reflection within a PLC coteaching session influence their instructional collaboration and what are their self-efficacy as it relates coteacher instructional planning and presentation?

Method

Participants

The setting for this case study was a SSD high school. The participant selection used purposeful sampling of ninth-grade social studies coteachers, one general education social studies teacher and one special education teacher, thereby, creating one co-pair. Based on the district's policy for determining the number of cotaught classes is based on the number of SWDs that need the social studies class for that semester. Therefore, in this study, each special education social studies teacher has the possibility of coteaching with one or two regular education social studies teachers. Social Studies is the focus because there is no state testing requirement for ninth-grade social studies, which allows the coteachers more instructional creativity. In addition, High School Z is comparable to High School X in that both social studies departments have inclusion classes for SWDs that were supported with a social studies general education teacher and special education teacher.

Inputs	Outputs		Outcomes-Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
General education and special education coteachers (9th-grade PLC for social studies) Commitment to participate 60 minutes of time A physical space to facilitate professional development with coteachers PLC Schedule with dates and time	PLC meetings PLC notes (entrance and exit tickets) Coteacher Rating Scale Assessment Focus Group Discussion	Attending once a month Coteachers write their + and – experiences about using the coteaching model at the beginning of each PLC meeting Coteachers complete CtRS Answer questions about coteaching experiences	Build an awareness of best practices of coteaching Increase knowledge of the five coteaching models Increase evidence of coinstruction using a coteaching model Increase in collaborative instructional planning Increase communication between coteachers Increase in teacher efficacy	To implement a PLC for coteachers throughout the school year Built capacity of coteaching teams within the building to lead and maintain coteacher best practices	To maintain and sustain a PLC for coteachers that provides evidence-based collaborative practices that impact student achievement Build capacity coteaching teams that support new coteachers through the school year

Assumptions: Most educators believe that ALL students can learn. Often there are low expectations for students with disabilities. Coteaching is one strategy to support inclusive best practices. Teachers and administrators are willing to make cultural changes related to the way instruction is delivered.	*External Factors:* District and building-level administrator buy-in, competing philosophies and initiatives, teacher contracts, time, teacher–student ratio; teacher buy-in.

Figure 3: PLC logic model.

Instrumentation

The CtRS (Gately & Gately, 2001) was developed as a diagnostic tool for coteachers to begin the conversation about how their coteaching experience could be enhanced, with the goal of coteaching becoming a collaborative partnership (S. Gately, personal communication, December 15, 2016). There is face validity in that the CtRS statements are indicative of

coteacher's behavior when performing at one of the varying stages of coteaching (Gately & Gately, 2001). Broadly speaking, the *beginning stage* of a coteaching partnership indicates that the coteachers' communication is careful, guarded and infrequent because teachers are unsure about their respective teaching roles, *compromising stage* indicates that there is a give and take about communication and responsibilities and *collaborating stage* shows an open line of communication, mutual respect and shared responsibilities displayed between coteachers (see Appendix F). The purpose of using the CtRS as an assessment tool was for both teachers to identify strengths and challenges in regard to the various areas of coteaching: (a) curriculum planning, (b) instructional presentation, (c) interpersonal communication, (d) classroom management, (e) physical arrangement of classroom, (f) familiarity with curriculum, and (g) grading/assessments. The goal of giving the CtRS is for both teachers to gain more knowledge about their individual coteaching practices and then to compare and reflect upon their joint practices.

There are two forms to the CtRS (Appendix B) and both forms have 24 similar questions, but one was labeled for the general education teacher and the other was labeled the special education teacher. Although the labels differ, the questions are the same on both forms. The teachers were to respond with a scale of 1 (*least like me*), 2 (*somewhat like me*) and 3 (*most like me*). They evaluated themselves on eight components of successful coteaching: interpersonal communication, physical classroom arrangement, familiarity with curriculum, curriculum goals and modifications, instructional planning, instructional presentation, classroom management, and assessment (Gately & Gately, 2001). Each component allowed the teacher to identify their individual strengths and weaknesses. The facilitation of the CtRS helped to navigate the directed dialogue and rumination during the PLC because the intended goal of the case study was to

explain their experiences as it related to their collaborative instructional practices, and personal efficacy for ninth-grade social studies coteachers at a suburban high school.

The teachers were also given a portion of the Tschannen-Moran and Hoy (2001) short form Teacher Sense of Efficacy Scale. The short form was broken into three sections: student engagement, instructional strategies and classroom management. Since this case study involved teacher collaborative instructional practices, the teachers were asked to complete four questions that centered on efficacy in instructional strategies. Since this research is qualitative in nature for four items were used as open-ended questions regarding teacher efficacy with instructional presentation (Tschannen-Moran & Hoy, 2001) See Appendix G for the entire scale. The following questions were given to the participants at the presession in October and as an exit at the end of session four in January:

- Prompt One: To what extent can you craft good questions for your students? (How do you determine whether or not you have asked a good question).
- Prompt Two: How much can you use a variety of assessment strategies? (What assessment strategies do you use? How do you determine when you use them? How varied are these strategies?)
- Prompt Three: To what extent can you provide an alternative explanation or example when students are confused? (Tell me your process for checking for understanding. How do you check for understanding? What do you do when you determine a student is not getting a concept?
- Prompt Four: How well can you implement alternative strategies in your classroom?

Focus Group

Morgan (1996) defines focus groups as a "research technique that collects data through group interaction on a topic determined by the researcher" (p. 130). The premise for this focus group was to solicit a group discussion regarding their experiences with the PLC sessions focused on coteaching practices. The focus group questions were open-ended and broad to gain insight and perceptions regarding their experiences within the PLC. An inductive coding process was used for the data analysis of the focus group where the raw data was analyzed for themes to develop open codes (DeCuir-Gunby, Marshall, & McCulloch, 2011). After identifying the initial codes, data analysis continued for commonalities, until codes were well defined (Creswell, 2014).

Participant Observer

At the initial stages of implementing the PLC, as a measure of good practice, the researcher took the role as a participant observer and disclosed this information to the participants early on to establish trust and acceptance (McCurdy & Uldam, 2014). As a participant observer, the researcher facilitated the monthly PLC meetings. One advantage as a participant observer was the researcher's understanding of the coteaching contexts and practices (Juris, 2007) as the researcher has worked in SSD as a high school coteacher for 24 years. To establish trust, acceptance and a willingness to participate, the researcher shared the purpose of the study was to better understand how focused discussion and reflective practices, during a PLC, supports the collaborative instructional process. A researcher's journal was kept which included notes from participants regarding comments, and experiences (Birks, Chapman, & Francis, 2008).

PLC Attendance

Participant attendance was an indicator to measure how often teachers went to going the PLC meetings. Attendance aligns with the logic model because it serves as an output (activity) and a core component of the program. The definition of PLC attendance is when a coteacher physically goes to a monthly meeting focused on coteaching practices. This indicator was measured using an attendance sign-in sheet which was collected at the end of each meeting. The measure of fidelity for teacher attendance was considered high if they attended five out of six sessions, medium for four out of six sessions and low was three or less (Dusenbury et al., 2003). The findings are discussed in Chapter V.

Content Agenda

Research suggests that PLCs have a structured format for the meeting presentation (Venables, 2011). Therefore, creating an agenda for the dedicated PLC focused sessions on coteaching helped to facilitate the participants' interactions. As a participant-observer, agendas provided guidance to the researcher on the design of session activities, the ability to make note of any changes based on real-time learning and provided an archival record of activities. The document review of the agenda also supported the researcher's ability to discern the fidelity of adhering to the program protocol which lends support to fidelity of implementation (Dusenbury et al., 2003).

Evidence of Collaboration

One of the tenets of an effective PLC in SSD is collective collaboration, where collaboration is defined as a systemic process, working together to analyze and impact professional practice to improve individual and collective results. As a district, there is an expectation of collective collaboration amongst all members in the county. As such, an effective

PLC allows teachers to collaborate to look at student work to improve instructional practices and share knowledge regarding strategies to increase student achievement (Villa et al., 2008). As there was an existing PLC structure in the case study high school, the researcher used the study's data points for evidence of collaboration. Therefore, the document review, pre- and post-CtRS, pre- and post-teacher instructional efficacy questions, focus group and researcher journal notes provided data to address teacher collaboration as it relates to participant experiences and their perceptions on collaborative instructional practices. These documents helped answer the three research questions and address the process research question involving the fidelity indicators of quality of program design, participant satisfaction, and program differentiation (Dusenbury et al., 2003).

Case Study Procedures

Presession

The initial PLC meeting began with participants signing the consent forms, providing demographic information and receiving a brief overview of the PLC expectations, related to the research, such as, the scheduling of monthly meetings, and participants' attendance. The researcher asked the coteachers to answer a short question to preassess their knowledge of the five coteaching models. Afterwards, they completed the CtRS assessment (Gately & Gately, 2001) and the four questions from the Tschannen-Moran and Hoy (2001) Teacher Sense of Efficacy Scale short form that asked about efficacy in instructional strategies.

Session One

The second meeting began with the researcher returning the teachers' CtRS scores to review individually. At this point, the researcher facilitated a PowerPoint presentation developed by Gately and Gately (2001) that described and explained the eight components of a coteaching

relationship: (a) interpersonal communication, (b) physical arrangement, (c) familiarity with curriculum, (d) curriculum/goals modifications, (e) instructional planning, (f) instructional presentation, (g) classroom management and (h) assessment with examples from the coteaching stages (beginning, compromising and collaborative; Appendix F). After the coteaching PowerPoint presentation, teachers worked together to identify their similarities and differences within each of the coteaching components. The researcher asked them to develop a goal using the CtRS data and after a few minutes of conversation the co-pair wrote a goal for the month. Before they left, the teachers completed an exit ticket to answer questions for efficacy for instructional strategies (see Appendix G).

Session Two and Three

The next two sessions were more focused on discourse and reflection sessions compared to the second session that had a heavy content focus (Croft et al., 2010; Desimone, 2009). During these sessions, each participant responded to an entrance slip question: what was the goal that you and your coteacher created from our last session and what did you do to achieve that goal? By the end of this session, the co-pair discussed and considered their collective strengths and challenges and created another goal. The goal was for the coteacher to self-assess, and share their thoughts regarding their experiences with meeting or not meeting their coteaching goal. (Friend et al., 2010; Scruggs et al., 2007).

Session Four

Participants were asked to complete the CtRS as their entrance ticket. Then, the teachers were prompted to think about their goal from the preceding month to answer the questions: what worked and what needs improving regarding collaborative practices? Using their information, they were directed to discuss their responses. The researcher took notes about any specific

strategies or tools that the teachers used to enhance collaboration. According to Murawski (2009), the dialogue and reflective practices solicited during this session helps to increase communication and collaboration.

Focus Group

There was one focus group meeting and the goal was to gather coteacher's personal experiences about attending a PLC that focused on supporting coteachers as well efficacy. During this time, they were asked if the CtRS assessment tool provided them information to be more collaborative (see Appendix I). They were asked if they are satisfied with the PLC delivery and process and how it could be improved (Yin, 2018).

Table 1

Intervention Timeline

Activity	Timeline	Duration	Description
Introductory	October 2018	60 minutes	Met with coteachers to complete consent forms, demographic information, coteachers PLC attendance and expectations and administer Coteaching Rating Scale and Teacher Sense of Efficacy short form
PLC meetings	October 2018	45 minutes	Met with coteachers to review CtRS score, present PowerPoint on coteaching best practices, create coteaching goal
	November 2018 December 2018 January 2019		Met with coteachers to facilitate a reflective dialogue about their previous months coteaching goals (October–December 2018); Administer CtRS December 2018
Focus group	January 2019	60 minutes	Met with coteachers to facilitate a reflective dialogue about first and second CtRS scores, coteaching goals and PLC experience

Data Collection

Multiple data sources, such as the CtRS, teacher efficacy on instructional practices, document review of the entrance slips, exit tickets, focus group, and researcher journal notes were collected to triangulate and create robust findings (Yin, 2018). These data sources included document review, focus group transcripts and the researcher journal notes.

Data Analysis

The evaluation used a single case study design to explain how during a PLC, focused and reflective practices supports collaborative instructional practices and teacher efficacy. The qualitative analysis used an inductive approach by coding the data to pull out emerging themes. The raw data from the focus group, document review and researchers journal were analyzed for themes to develop open codes (DeCuir-Gunby et al., 2011). After identifying the initial codes, the researcher continued to analyze the data to identify commonalities or connections between the data further to create subcodes. At which point, a formal definition was assigned to each code. As a participant observer, the researcher analyzed notes and comments about the coteacher's personal experiences with planning, teaching, and PLC process being mindful of the contextual issues happening in the school and how they may present themselves during the research process. For further qualitative validation, methodology triangulation uses different data sources from the documents, focus group discussions, and the researcher's journal nots to describe the participants' experiences with the PLC focused on coteaching practices. Also, the transcribed data from the focus groups used member checking to ensure accuracy whereby each participant was given the transcription to read to ensure that what they said was recounted accurately (Creswell, 2014). Lastly, the researcher kept a journal with reflective notes that included quotes, phrases, keywords, insights or experiences that was used when comprehensive

field notes are later compiled (Birks et al., 2008). Therefore, the goal of this case study described how structured opportunities for discourse, during a PLC, involving planning, collaboration, and reflection supports the coteaching relationship between the special education and general teacher pairs.

Table 2

Summary Matrix of Intervention Evaluation

Research question	Measures	Data collection	Data analysis	Process evaluation question
How does the use of the CtRS influence ninth-grade social studies coteacher's instructional planning? How does reflection within PLC coteaching sessions influence coteacher's instructional collaboration practices?	Coteacher perceptions about collaborative planning and practices	Coteaching Rating Scale (Gately & Gately, 2001) PLC notes (entrance and exit slips, work produced in sessions, etc.) Focus group Researcher journal	Inductive coding	How has the study implementation adhered to or differed from the proposed implementation procedures?
What is the impact of a PLC focused on coteaching for ninth-grade social studies and special education teachers self-efficacy?	Teacher Sense of Efficacy (short form)	Focus group Exit ticket: Efficacy in Instructional Strategies (items number 5, 9, 10, 12)		

Trustworthiness and Credibility

In qualitative research, trustworthiness of the study is established by (a) credibility, (b) transferability, (c) dependability and (d) confirmability (Anney, 2014; Guba, 1981). Credibility

"establishes whether or not the research findings represent plausible information drawn from the participants' original data and is a correct interpretation of their original views" (Anney, 2014, p. 276). In this case, the researcher used triangulation of data and member checks to establish credibility. The data sources include document review of pre- and post-CtRS and teacher efficacy questions involving instructional practices, PLC entrance slips, exit tickets and notes, focus group and researcher's journal notes. Triangulation allowed the researcher to gather enough information to address each research question as well as provide a rich description of the participants' experiences with the PLC. In addition, according to Anney (2014), member checking helps to eliminate researcher bias when analyzing and interpreting data and maintain consistency with what was told to the researcher. Therefore, member checking allowed the coteachers to read the focus group transcription and PLC data analysis to ensure what they said was captured accurately.

Transferability is the extent that the results of qualitative research can be transferred to other contexts and is determined by thick description and purposeful sampling (Bitsch, 2005). Thick descriptive data regarding the research processes, such as data collection, context of the study, helps to establish transferability to other similar contexts (Anney, 2014). Within the methods section is rich description detailing the participants, instrumentation, focus group, role of the researcher (participant observer), PLC expectations (attendance, content agenda, and evidence of collaboration), study procedures, data collection and analysis. Therefore, all of these items help to establish transferability to a similar context. Purposeful sampling is another aspect to determine transferability and is defined as "selecting units, such as individuals, groups of individuals, or institutions, based on specific purposed associated with answering a research study's questions" (Teddlie & Yu, 2007, p. 77). A purposeful sampling of ninth-grade social

studies teachers was solicited to participate in this case study because this grade level and discipline does not have a state testing requirement which allows for more leeway in the use of their PLC and planning time.

Anney (2014) outlines dependability as the participants' ability to evaluate the findings, interpretations, and recommendations of the study to ensure that they are supported by the study. Dependability can be established using an audit trail, stepwise replication code–recode strategy and peer examination (Anney, 2014). Therefore, dependability was established using a peer examination by asking the researcher's adviser of Johns Hopkins University to read through the findings, discussion and recommendations sections and then discuss these sections with the researcher. According to Bitsch (2005), peer examination helps the researcher to be honest and reflective.

The last aspect of determining credibility is confirmability, which states that "the data and interpretation of the findings are not a figment of the inquirer's imagination; a reflexive document kept by the researcher to reflect on, tentatively interpret, a plan data collection" (Anney, 2014, p. 279). To establish confirmability, the researcher journal was kept capturing key words, phrases and personal reflections from the PLC sessions as well as a triangulation to reduce the change of investigator bias.

Researcher Positionality

Researcher positionality speaks to the researcher's beliefs, experiences, interpretations, views, understanding and the impact these items can have on the truthfulness of the research (Holmes, 2014). In the context of this case study, the researcher's professional experience connects closely with the case study topic of coteaching. Having served as a special education teacher for over 20 years in SSD, there have been frequent coteaching assignments in high

schools; however, none have been in the context of this current case study. The researcher holds the belief that when teachers assume the role of coteacher, without the knowledge of coteaching best practices and support of professional training, working together for the first time is a challenge. However, co-pairs can overcome these challenges with proper information, time for collaboration, and open dialogue (communication) on a consistent basis. With time, the teachers can galvanize and harness their individual strengths to work as a team. However, this process does not happen overnight, which requires patience, time and effort from both parties. The researcher's beliefs exist, in part, of personal experience and discussions with other coteaching colleagues and have led to the undertaking of doing this research on how a PLC can support the collaborative teaching process.

Conclusion

The purpose of this explanatory single case study described how structured dialogue during a PLC for focused on collaborative instructional planning, reflection and efficacy supports ninth-grade social studies coteachers at a suburban high school. Overall, the intent was to gather a variety of data to describe and explain the coteacher's experiences, the opportunity for collaborative planning and reflection structured around effective coteaching practices and their sense of efficacy from the beginning to the end of the study (DuFour, 2004; Riggs & Enochs, 1990; Venables, 2011).

Chapter V

Findings and Discussion

Coteaching is a method of instructional support for SWDs in the classroom with general education students (Friend et al., 2010). In this arrangement, the goal is to have a general education and a special education teacher work together with planning and presenting the lessons, however, literature suggest that certain challenges prevent collaboration (Hamilton-Jones & Vail, 2014; Hang & Rabren, 2009; Kohler-Evans, 2006). Challenges, such as lack of professional training, inadequate planning time, and parity hinders the collaborative instructional process (Lingo, Barton-Arwood, & Jolivette, 2011; Mastropieri et al., 2005; Murawski & Hughes, 2009). One way to mitigate these challenges is through JEPD (Croft et al., 2010). The already existing PLC structure, at High School Z, supported by SSD policy and practices was utilized to specifically support ninth-grade social studies coteachers. The goal of the study was to describe how an intervention goal focused on supporting high school coteachers' collaborative practices and efficacy through the use of structured and reflective discourse.

Process of Implementation

This intervention took place from October 2018 to January 2019, with a general education teacher and special education teacher who were coteaching a ninth-grade social studies class in SSD. During the intervention period, the researcher facilitated a presession and four PLC sessions as well as a focus group session with the co-pair. The participants completed a pre- and post-CtRS (Gately & Gately, 2001; Appendix B) as well as answered open-ended teacher efficacy questions on instructional practices (Tschannen-Moran & Hoy, 2001; Appendix H). This section describes how the researcher implemented the intervention for this study.

Presession

The purpose of this initial presession meeting was to have participants sign the consent forms, gather demographic information and provide a brief overview of the PLC expectations, regarding the monthly meeting schedule and attendance. This session was held in one of High School Z's teachers' lounge and lasted 60 minutes long without interruption. During this time, the researcher asked the teachers to take a short questionnaire to assess their knowledge of the five coteaching models, the CtRS (Gately & Gately, 2001) and four open-ended questions regarding teacher efficacy in instructional strategies adapted from Tschannen-Moran and Hoy (2001; see Appendix H). At the close of this presession, the researcher arranged for the next meeting time. The coteaching pair's time with the researcher was their PLC for that respective week. The remaining weeks the coteaching pair participated in their schools' PLC as normal.

Session One

This meeting began with the researcher providing the teachers with their CtRS scores from the presession, which showed how the scores were broken down into the domains of coteaching. The researcher then explains that the next portion of this session provides them with detailed information about the CtRS and what the scores mean. After this brief overview, a coteaching PowerPoint was presented that described and explained the eight components of a coteaching relationship as described by Gately and Gately (2001). The eight areas are (a) interpersonal communication, (b) physical arrangement, (c) familiarity with curriculum, (d) curriculum/goals modifications, (e) instructional planning, (f) instructional presentation, (g) classroom management and (h) assessment. Included in the PowerPoint were examples of how the scores placed the coteacher at the beginning, compromising and collaborative stages. The researcher further explained that the lowest total score for each domain is 3 and the highest total

score is a 9. A score of 3–4 indicates that the coteacher is at the beginning stage, 5–7 at the compromising stage and 8–9 is at the collaborative stage. But for the clarity, according to Gately and Gately, the beginning stage indicated guarded communication, lacks openness with one another, may leave dissatisfaction unstated; polite and small talk; compromising stage indicated that the conversation is more open, give and take ideas, increase in the use of humor; and collaborating stage indicated that teachers become role models for effective communication with students; increased use of nonverbal signals to communicate (see Appendix F).

Then, the researcher asked the teachers to share their scores with one another to identify their similarities and differences and note which areas were at the beginning, compromising and collaborative stages (Appendices C & D). Once they concluded with this part, the researcher asked them to use the data from the CtRS to develop a goal from the domains that had a total score in the beginning or compromising stages. It appeared that they were struggling to choose a goal so the researcher helped facilitate this aspect this by asking probing questions, "When looking at the beginning or compromising scores, which of these, do you feel is most important to your coteaching partnership?" and "Is there one particular area that stands out more than the other?" After a few more minutes, the co-pair decided on a goal, wrote it down and shared the goal with the researcher. They indicated that they wanted to work towards consistent time for collaborative instructional planning. In other words, they wanted to carve out time weekly to plan together. While they shared a common planning time, they said that outside factors had prevented them from planning together regularly.

Since the goal was to plan lessons together on a weekly basis, the researcher asked them to be mindful of this goal when other factors appear to interfere. At this point in the session, s, there was rich dialogue as the participants were discussing how the components of the CtRS

relates to their partnership and teaching practices. Specifically, they were recalling previous planning sessions and discussing the details as it related to how they worked together. There were comments about how the special educator could have presented more the lesson or worked with a small group. The PLC session was scheduled for 60 minutes but went overtime by 15 minutes due to their conversation. As the participant observer, the researcher was establishing trust and did not abruptly stop the discussion because the teachers were doing what the intervention called for which was engaging in structured discourse At the end of the session, the researcher reflected on the participants' conversation and responses by noting significant phrases or statements in the research journal.

Session Two

This session was held in the teachers' lounge as last month and occurred across 60 minutes long without interruption. Since the coteaching pair met monthly with the researcher, this session began with a review of the presession data on their knowledge of the different coteaching models. The researcher used Friend and Cook (2007) to outline the five coteaching models: (a) team teaching, (b) shadow teaching, (c) support teaching, (d) parallel groups and (e) station teaching (Appendix J). After this presentation, the general education teacher admits that he heard of some of these models but could not recall them during the presession and the special education teacher recalled three models. After this overview, the researcher asked them to use one of these coteaching models with a lesson before they meet again. The special educator revealed that they currently use the support teaching model whereby the general educator facilitates the lesson and the special educator roams the aisle checking for student understanding (Thousand et al., 2006). Ultimately, they chose to use the station teaching model with the next unit.

At this point in the session, the researcher presented the entrance slip which asked, “Did you reach your coteaching goal? What worked? What didn’t work?” They teachers took about five minutes to jot down their thoughts and then the regular educator reminded the researcher that their goal was to consistently plan together. Both teachers appeared frustrated as the regular educator explained, “Seems like we never get the chance to plan the way we want. Something always seems to come up. We’re being pulled for department meetings during planning or at lunch, kids come for extra help.” The special educator mentions that she has tons of special education paperwork to complete. They both agree that it’s not enough time.

> Our intention is to work together but every day it’s something else. We tried other forms of planning like creating a Google classroom to share plans, and texting, but it’s not like being in each other’s presence. Gets very stressful and frustrating. (Respondent GE)

This statement was not surprising as comments like this was found in coteaching literature. For instance, in Villa et al. (2008) “A general educator said, I put the blame on both of us because we have to set aside time to plan, but that is the hardest thing, finding time” (p. 508). Based on coteaching research, collaborative planning is a benchmark for establishing an effective teaching partnership, however, frustration over lack of time was a common theme (Hamilton-Jones & Vail, 2014; Scruggs et al., 2007). In addition, Fennick and Liddy (2001) case study stated that lack of collaborative planning time forced the general education teachers to plan alone, thus alienating the special education teachers from the instructional planning and presentation process, which incited frustrating feelings.

Due to the case study teacher’s feelings of frustration around not being to plan together, they used the remaining PLC time identifying one day a week to collaboratively plan. They chose the following dates: November 7, 14, and 28 during third period which is their common planning time. November 21 was omitted because it was a half-day schedule due to the holiday.

As a reminder, the researcher asked them to include using one of the coteaching models while planning their lessons. In the end, we scheduled a date and time to meet next month.

Session Three

This session was also held in one of High School Z's teachers' lounge and lasted 60 minutes long without interruption. At the beginning of session three, their appearance was one of excitement. Based on review of the researcher's journal is was noted that the special educator said, "We finally got a chance to plan!" The sentiments shared by the special educator align with coteaching research that indicated that teachers felt happier and less isolated after planning together (Villa et al., 2008). As they settled, they were presented with the same entrance slip, "Did you reach your coteaching goal? What worked? What didn't work?" This time they were much more eager to verbalize their thoughts. The special educator said, "Yes, we finally planned an entire lesson together." The researcher asked for clarification, "What does that mean? What is an entire lesson?" She further explained that the students were working on a crafting a narrative \about a significant historical event. "Because we scheduled planning time, we held to it and was able to carve out a step-by-step plan on how to craft a history narrative and infused technology in a way that the students understood" (Respondent SE). They further clarified that they planned together on November 7 and 14, but not the 28 as the special educator had a meeting to attend. Overall, their comments, reactions and statements showed their level of satisfaction working towards their planning goal and the benefits of student learning. When the researcher further probed about using a coteaching method, the regular educator chimed in,

> Yes, we used station teaching for this unit. I taught the initial part of the lesson and she [special educator] facilitated the technology portion, since tech is her thing. The students rotated to each station and responded very well. I mean, they didn't complain like normal and everyone seem to buy into it. It was a pleasure to watch the entire class working. (Respondent GEE)

From their comments, it appeared that both teachers felt very positive about their planning and presentation and the student seemed to benefit from such a positive experience as well. While this is a case study with one pair, their example supports the research of Scruggs et al. (2007) meta-analysis which revealed that mutual planning and teacher attitude are critical aspects of successful coteaching.

Unfortunately, this session was cut short by 20 minutes because the regular educator had to leave school by a certain time. The researcher, however, was able to ask them if they wanted to work towards a new coteaching goal or keep the same goal. They both said that they would like to continue the same goal and the researcher reminded them to attempt to use an additional coteaching method with another lesson as well as identify collaborative planning dates for the month of December. The time constraints of research and professional development will be further explored in the discussion section.

Session Four

The school semester is over at the end of January and coteacher schedules often change; therefore, this was the last PLC meeting associated with this study. This session was held in the High School Z's teachers' lounge and lasted 60 minutes long without interruption. At the beginning of this session, the researcher gave the post-CtRS, and the entrance slip questions: Did you reach your coteaching goal? What worked? What didn't work? This time they appeared a little less excited in their response, as there was less talking and more writing. This session happened three days after returning from winter break. This time, the researcher had to initiate the conversation by asking, "So how did planning go in December? Were you able to plan together?" The special educator replied,

> It was ok. I mean we set dates, but things didn't go as smoothly as before because we both had surprise observations by an administrator and department chairperson on two

> different occasions. In my postobservation meeting, I was told that they wanted to see me [special educator] teach more. I explained that on that day, we planned to use the support teaching model because some of the SPED [special education] kids were struggling with the assignment. We had such a great experience last month, that I wish my administrator could have seen that. (Respondent GE)

The regular educator said something similar, "My department chairperson observed me too, but she did not say anything about coteaching. She just wanted to know if she [special educator] teaches sometimes" (Respondent SE). They further revealed that December was a difficult month to maintain their collaborative planning schedule because of other school responsibilities, such as proctoring the state tests, and the special educator said she had multiple graduating senior annual review meetings. Interferences such as other school responsibilities are not atypical for coteachers (Murawski & Lochner, 2011).

By the end of this session, they each answered exit ticket of four open-ended teacher efficacy questions regarding instructional planning. While this was the last PLC session, they were reminded to continue their planning sessions and conversations around collaborative teaching practices. The researcher suggested that they share their experience and information with the social studies cohort, resource teacher and administrators. The regular educator revealed that they may not be scheduled to teach together second semester; however, he was meeting with the master scheduler to ask if they could continue to teach together. The regular educator comments suggested that he was pleased with their partnership and wanted to maintain their relationship. Pancsofar and Petroff's (2013) study revealed that when coteachers where provided coteacher strategies and skill development they displayed a more positive attitude towards coteaching that resulted in collaboration and a willingness to learn from one another.

Focus Group

The purpose of a focus group is to collect data through group interactions on a topic determined by the researcher (Morgan, 1996). In this case, the focus group was a discussion with coteachers regarding their experiences as it relates to collaborative planning, the processes and procedures relating to discourse C and their overall satisfaction of facilitation of each session. This session occurred in the regular education teacher's room and lasted for one hour.

Since time was of the essence (after school and/or teacher commitments) it was more conducive for the researcher to conduct the focus group versus bringing in an outsider person who might be perceived as being bias free. Morgan (1996) stated that a focus group moderator should be one who has knowledge of the topic and is someone the group can relate to but also give authority to; therefore, the focus group was facilitated by the researcher. The initial question asked: "What do you think about when you hear coteaching and has this perspective changed since the first time we met?" The consensus between the participants was that they see coteaching as two active participants, working together on all facets of class, including instruction, engagement, grading and planning. They also noted that as the semester goes along, they felt more comfortable working together. The researcher then asked, "What would you modify to improve the collaborative aspect of coteaching?" They both unanimously said time is the biggest factor. Having more time to plan and discuss content and grading would be beneficial. The remaining set of questions asked if they felt the PLC sessions were beneficial and did the conversations/reflection support their partnership. Overall, both participants were satisfied with the PLC process and felt that they gained knowledge and strategies that would help with student learning.

Findings

Qualitative data was collected using document review from the PLC sessions, CtRS data, open-ended teacher efficacy questions, researcher journal notes and focus group responses. The data was analyzed using an inductive approach by coding the data for commonalities or connections and then identification of themes (DeCuir-Gunby et al., 2011). Triangulation of data was used to provide a rich description and to validate the findings; member checking was also used to support the trustworthiness and credibility of the focus group responses (Creswell, 2014). Lastly, the data sources were used to answer each of the research questions (Table 1).

Thematic Findings

According to Saldaña (2013), "a code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). Using the methods described in Saldaña, the researcher began the coding process by reading through what the teachers shared in the PLC session documents, open-ended teacher efficacy questions adapted from Tschannen-Moran and Hoy (2001), focus group, and notes from the researcher's journal until key ideas or words emerged. These singular codes were then organized into subcodes and then grouped together into themes or variables with commonalities. The researcher identified that interference with planning time or things that prevented them from planning; frustration or stressful emotion as a result of a situation involving collaborative planning and planning time or time set aside for instructional collaboration were themes that emerged (see Table 3). The coding process indicated that these themes (specific variables) had challenged coteacher instructional collaboration within this case study (Gibbs, 2007; Hamilton-Jones & Vail, 2014; Hang & Rabren, 2009; Kohler-Evans, 2006).

Table 3

Coding Chart

Codes and subcodes	Definitions and indicators
Interferences with planning time	things that impede or interfere with instructional planning
Lack of time	cannot modify lesson; plan on the fly; attempted other methods of planning-texting or talking late at night
Outside variables	SPED teacher has small kids at home; school responsibilities; special education meetings; kids need help at lunch; meetings with other teachers
Scheduling conflicts	proctoring assignments being pulled in different directions; something comes up; schoolwide testing
Frustration	a sense of uneasiness or stress
Content	SPED teacher does not know the curriculum; special education responsibilities
Planning time	time allocated to work together for instructional planning purposes
Dates	agreed to set specific dates to plan; setting dates helped with planning; meet every day to focus on the next day
Instructional method	Station teaching method; Support teaching method (coteaching method); productive partnership; discussed expectations at the beginning of the year
Student outcome	Students did not complain; student learning

Interferences With Planning Time

One theme that emerged from the data were interferences with planning time, which is a major issue with coteaching (Murawski & Dieker, 2004). In this case study, the coteachers spoke very candidly about how these interferences impacted their planning time. The regular educator specifically noted that other responsibilities prevented them from meeting. For instance, he said, "During lunch, I always have kids that need extra help, so they come to my room." Providing students with additional support during lunch is considered good practice, but if coteachers wanted to use this time for planning, then it becomes an obstacle for them (Friend & Cook, 2007). The special educator talked about her additional responsibilities, such case managing SWDs, like checking grades, writing IEPs, and attending student meetings. These examples are

indicative of the needs of a high school setting; however, they can become barriers for co-pair collaboration. Lastly, the coteachers also pointed out how other school-related variables, such as proctoring state tests, attending administrative meetings, or in the case of special educators, attending planning meetings for SWDs, impact their ability to work together during the school day (Thousand et al., 2006).

As a result of the interferences, there were feelings of frustration. The special educator, specifically, spoke of how her lack of planning time prevented her from knowing the activity or lesson for the day. She said, "It's frustrating because I want to know what we are working on before I enter the class so that I am prepared to help the students." The literature supports her comments, according to Diaz (2018), some general educators and special educators never communicate outside of the classroom which prevented the SWDs from receiving the best support possible. SWDs have a written educational document (IEP) that outlines the nature of their disability and necessary support of a special educator; however, accommodating or modifying assignment is challenged when the special educator is uncertain of the lesson (Lingo et al., 2011). For the most part of this case study, the special educator said that she was more frustrated because she did not feel as if she was meeting the expectations of an effective co-pair.

Up to this point, the pair shared anecdotes about limitations to planning time and feelings of frustration. But, when the researcher asked, how do they make up for the lost time? The spoke of creative planning solutions, such as "creating a Google classroom, texting, or talking in the evenings, however, they both said that working in person is the best" (Researcher Journal, p. 2). But the better solution is for school-level administrators to buy-in to the preplanning which warrants scheduling both teachers with the same planning periods and, as much as possible, honoring this time (Friend et al., 2010). Therefore, teacher collaboration is not just about making

time for instructional planning, this time is necessary for the pair to work together to create instructional activities that will benefit both the general education and special education students (Thousand et al., 2006).

Table 4

Research Questions

Chapter section	Research questions
Evidence of collaboration	How does the use of the CtRS influence ninth-grade social studies coteacher's instructional collaborative planning?
	How does the reflection within the PLC coteaching sessions influence coteacher's reported instructional collaboration practices?
Teacher efficacy	What is the impact of a PLC focused on coteaching for ninth-grade social studies and special education teacher's self-efficacy?
Fidelity implementation	How has the study implementation adhered to or differed from the proposed implementation procedures?

Within this study, to combat the interferences ,during the first PLC session (October 2018), the co-pair set specific dates in November for future collaborative planning. When we met again, according to their entrance tickets, they met their goal and successfully facilitated a lesson using the station teaching coteaching method. Working alongside another professional is no easy feat; however, research indicates that effective coteaching has benefits (Thousand et al., 2006). As a part of Thousand et al. (2006) article, "Co-teaching can also result in increased student performance on high-stakes assessments with special education students increasing their scores by 20% on the Gateway English test scores" (p. 240). The work that goes into collaborative instructional planning serves the most academically challenged students but without their cooperation and support, these students are likely to continue to lag behind their peers (Gerber &

Popp, 2000). Therefore, the data from the PLC documents, researcher's journal, open-ended teacher efficacy questions, and focus group responses provided descriptive information to highlight specific codes and subcodes to highlight that collaborative instructional planning is possible but other variables can prevent the co-pair from working together.

Research Question 1: Evidence of Collaboration

The aim of this section is to answer the research questions involving evidence of collaboration, impact on efficacy and fidelity of implementation. As a reminder, the purpose of this case study is to describe how focused discourse and reflection during the PLC sessions influences coteacher's collaboration and efficacy. For clarity, collaboration is being defined as a process of working together to analyze and impact professional practices to improve individual and collective results. As mentioned in the previous chapter, the CtRS (Gately & Gately, 2001) is a diagnostic tool designed for coteachers to identify their strengths and challenges within the eight areas of a coteaching partnership: interpersonal communication, physical classroom management, familiarity with curriculum, curriculum goals and modifications, instructional planning, instructional presentation, classroom management, and assessment.

Therefore, the CtRS is one measure used to identify their strengths and weaknesses to facilitate conversations about their coteaching practices. The teachers were given the CtRS in October 2018 and again (post) January 2019. There are two versions of the CtRS indicative of their school position: regular education teacher and special education teacher, but the questions are similar on both versions. They each responded using the scale of 1 (*least like me*), 2 (*somewhat like me*) and 3 (*most like me*). Within each category, the CtRS scores placed the coteacher at the beginning, compromising and collaborative stages. According the CtRS scale, the lowest total score for each domain is 3 and the highest total score is a 9. A score of 3–4

indicates that the coteacher is at the beginning stage, 5–7 at the compromising stage and 8–9 is at the collaborative stage.

The answers from their CtRS did not vary much from the regular educator to the special educator (see CtRS scoring sheet or Appendices C & D). For instance, the pre-CtRS (October 2018) showed that their scores were the same in the following sections: interpersonal communication, physical arrangement, classroom management and assessment. But, in the areas of instructional planning, instructional presentation, and curriculum goals/modifications, there was a 1-point difference between them. Specifically, the regular educator scores were a 9, but special educator scores were an 8. Although this is a 1-point difference, the CtRS scoring guide put them in the collaborating stages. However, the 1-point difference was enough to discuss why they answered differently. Thus, the special educator answered that these areas were *somewhat like me*, whereas the regular educator answered *most like me*. After they shared their scores and viewed the CtRS PowerPoint presentation during the first PLC session, the researcher pointed out that their scores were the same for every area, except for instructional planning, instructional presentation, and curriculum goals/modifications. Specifically, the special educator answered that the following questions as *somewhat like me*:

- Instructional planning (Question 21): “Time is allotted (or found) for common planning.”
- Instructional presentation (Question 6): “I often present lessons in the cotaught class” (Question 21); “Students accept both teachers as equal partners in the learning process.”
- Curriculum Goals/modifications (Question 20): “Student-centered objectives are incorporated into the classroom curriculum.”

Given this information, the researcher asked the special educator to explain why she answered somewhat like me for the instructional planning time. She said "Yes, we have a common planning time, but we don't always get to use that time to plan together. Every week, I have SPED meetings so he [regular educator] plans without me and fills me in later." The researcher further probed, how does this impact the lesson being presented in class? The special educator said that "most days, I support the students while he teaches. Sometimes, I ask him to clarify something, if a student really doesn't get it but most days, he does all the teaching." The researcher further asked, then do you believe the students see you both as equal teachers? The special educator said,

> I think the kids see us as teachers, maybe not equals. The special education students know I am there to help them, but some of the gen ed [general education] students think I am paraeducator [teaching assistant]. In the beginning of the school year when we first started teaching, I tried to help a student and he said, but "you are not the real teacher." Wow, I thought. Hurtful. But I would like to plan with my coteacher so that I know what's going on before I enter to class. I also would like to help modify the lesson, in advance, especially if it is something, I know the SPED students may struggle with. (Respondent SE)

The regular educator chimed in, "I know that she wants to plan with me, but I am used to planning on my own. Now, I know I should do a better job of arranging a time that works for us." In this example, the special educator clearly articulated and described her thoughts of not having enough time in their schedule to work together and the outcome in which student view her position in class. Similar comments are prevalent in coteaching research (Mastropieri et al., 2005). In another article on coteaching, planning time was viewed as a priority for instructional development and evaluation and teachers voiced their concern when other competing school responsibilities impacted their time (Walther-Thomas, 1997). From the special educator's perspective, it appeared that lack of collaborative planning impacts parity or the roles in which students view their teachers.

Since collaborative instructional planning and presentation were the two areas in which the coteachers had differences, their goal was to carve out specific dates and times for instructional planning (Appendix E). As such, the pre-CtRS data and discussion/reflection illuminated that collaborative planning time was a valuable goal. Based on the Gately and Gately (2001) coteaching stages, the co-pair CtRS results placed them at the collaborating stage where the teachers are effective communicators and increased use of nonverbal signals to communicate. However, based on the researcher's observation during the PLC session and notes, they appeared to be at the compromising stage where they were becoming more comfortable with open dialogue and reflective practice. The Gately and Gately coteaching stages are as follows:

- Beginning stage: Guarded communication, lack of openness with each other; may leave dissatisfaction unstated; police, small talk.
- Compromising stage: Conversation is more open, give and take ideas, increase in the use of humor.
- Collaborating stage: Teachers become role models for effective communication with students, increased use of nonverbal signals to communicate.

Over the course of PLC sessions two, three and four, the researched asked these entrance slip questions: Did you reach your coteaching goal? What worked? What didn't work? Each time, the coteachers showed evidence of collaborative planning and use the coteaching model. At one point the general educator said,

> We tried to use all of the coteaching models. But the model that works best for us is team teaching. We play off each other well, unless it is one those crazy days where everything is off. However, most of the time we use the team-teaching model and it seems to help the class function well and run smoothly. The students also seem more successful. Especially when both teachers know 100% what is going on and what the end objective or goal is. (Respondent GE)

He further explained that “as a coteaching PLC we are an effective pair. I feel like if we had more time to plan in person and prep the materials it would help our classes function better.” The special educator also articulated that her perspective of coteaching has shifted into a shared partnership where they are both feel more responsible for classroom.

The post-CtRS data of the regular educator stayed the same; conversely, the special educator answers aligned more with the regular educator. In terms of the instructional planning and presentation sections, her scores increased for Question 6: “I often present lessons in the cotaught class,” which indicated that she was taking part in facilitating instruction. This change was largely the result of the pair using different the coteaching models that requires both teachers to take part in the teaching process. Overall, it appeared that the CtRS tool helped to illuminate their need for working together with instructional planning and class presentations. This statement aligned with Gately and Gately (2001), creator of the CtRS, which stated that “co-teachers benefit from completing the CtRS independently and then comparing results with their partners. This can form the beginning of professional discussions for co-teachers as they evaluate their perspective of their work in the co-taught classroom” (p. 46). Therefore, it appeared that the partnership benefitted from using this diagnostic tool to show that there was a need for collaborative planning.

Research Question 2: Reflection With PLC

An authentic PLC used a JEPD approach to learning that situates individuals in the context where they work (DuFour, 2004). The act of reflecting was a key component of an effective PLC whereby teachers come together, not just to look at student work, but offer serious feedback to one another with the intention of improving student achievement (Venables, 2011). Therefore, in this study, the conceptual framework (Figure 2) used an effective JEPD to support

high school coteachers practices and efficacy. As a part of this study, during sessions two, three and four, teachers answered the entrance ticket questions: Did you reach your coteaching goal? What worked and what didn't work? A large part of their PLC discussion was directed around these questions where they were asked to think about their teaching practices as it related to collaboration. It should be noted that there was some overlap between Research Questions 1 and 2, in that, the teachers used the CtRS to develop their coteaching goal and the following month, reflected upon how they met or did not meet their goal. For example, in the PLC session one, their coteaching goal was to commit to planning together once a week. At one point, the special educator revealed that other school-related responsibilities had prevented them from meeting weekly. However, research supports collaborative planning (Dieker & Murawski, 2003) and through their discussion and reflection, they realized the significant affect that could have on their partnership. Another aspect that surfaced, during analyzing the data, was their frustration with not having enough time for collaborative planning. During PLC session two, the regular educator expressed his frustration of not being able to commit to planning because of other duties.

Although our PLC sessions occurred across a semester, there was evidence of collaboration when they noted a successful lesson presented to the students. This, according to coteachers, was due to their commitment to creating a lesson together that appeared to work for most of the students. While these are minor stepping stones towards collaboration, coteaching literature fully supports providing ample time for teachers to coplan, coinstruct and coassess (Villa et al., 2008).

Research Question 3: Teacher Efficacy

Teacher efficacy research has been linked to teacher performance and student achievement and supports the notion that a teacher's level of confidence can guide their students to success (Tschannen-Moran & Hoy, 2001). Teacher efficacy suggest that a teacher with strong self-efficacy may be more resilient when faced with challenging students and more innovative with their instructional practices (Tschannen-Moran, Hoy, & Hoy, 1998). In this case study, the research question asked how a PLC focused on coteaching impacts teacher self-efficacy. The coteachers were given open-ended questions adapted from the Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001). Since this is a descriptive case study, the efficacy questions were in an open-ended format specifically addressing instructional practices (Appendix H). The coteachers were asked these questions during the October 2018 and January 2019 sessions.

During the presession, the initial response showed that both teachers felt confident about their instructional practices. Upon further review, the regular educator noted that because he has been teaching social studies for an extended period, he felt more confident because he knows the curriculum. When asked about using a variety of assessment strategies, he retorted that he uses quizzes, exit tickets, group assignments, classwork, common tasks, and constructed responses to gain a better understanding of the students' comprehension as well as spacing out bigger assessments so the students do not get overwhelmed. The special educator, however, felt confident in her ability to provide an alternative explanation or examples when students are confused as well as implementing alternative strategies in the classroom. However, the special educator doesn't always feel confident presenting the lesson because, unlike her coteacher, she doesn't know the curriculum well.

The answers to their questions indicated that there was a sense of confidence to instructional planning, but their behavior during the PLC sessions showed otherwise. During the initial session, the researcher noticed that the special educator did not appear to comfortable with her coteacher as the dialogue between them was short. Many times, the researcher had to initiate the dialogue and use probing questions to maintain the conversation. But, by the last session, there was an ease in communication, in that there was a fluid discussion between them and they referred to the students as a "class," instead of the "general education students" or "special ed students."

Postefficacy responses did not change much from the initial replies. Both teachers still felt confident in the areas that they previously mentioned; however, the special educator noted that because they planned lessons together, she was more comfortable in taking the lead with some instructional presentations. According to Van Garderen et al. (2012), they cited studies that reported "positive outcomes of collaboration for teachers, such as instructional improvement through the use of a greater variety of teaching techniques, improved knowledge and skills for teaching, professional growth, and a more positive attitude towards teaching" (p. 484). These comments suggest that while they both felt efficacious, in terms of their instructional practices, there is value added in addressing teacher efficacy as it relates to coteaching.

Research Question 4: Fidelity Implementation

It is important to reflect on the various aspects of fidelity: (a) adherence, (b) dosage, (c) quality of program delivery, (d) participant satisfaction, and (e) program differentiation (Dusenbury et al., 2003).

Adherence. Adherence to the program is one aspect of fidelity to help support the study's trustworthiness and credibility (Dusenbury et al., 2003). In this study, when the

coteachers agreed to participate, they were committing to attending the monthly 60-minute PLC session from October 2018–January 2019 (Appendix E). In the same vein, they were agreeing to be an active participant through discourse, feedback and reflection. Each participant attended all the sessions and the sessions adhered to the time frame and agenda (Appendix E). The goal was for each teacher to attend five PLC sessions that support collaborative teaching practices to engage in discussions and reflections that would help foster collaboration as well as focus group. Even though there was a schedule adjustment at the beginning of the semester, the co-pair adhered to the PLC expectations by attending all the sessions, participated during each session and completed the tasks in between our meeting dates. In addition, based on the data collection, the researcher gathered enough descriptive information to conclude that they adhered to the session agenda.

Dosage. In terms of dosage, or the amount of time of the program, the literature suggested that a PLC should be held for a minimum of one hour weekly (Venables, 2011). Due to the district's IRB protocol, the researcher was unable to meet with the teacher's during the school day. Therefore, the decision to meet once a month, provided them with ample time, to work towards their coteaching goal. The original plan stated that implementation would be in September 2018, but SSD IRB prohibits research implementation during September. The researcher still maintained the number of PLC sessions as originally stated in the proposal by adjusting the dates in October 2018 (Appendix E). Venables (2011) stated that school's need to be flexible and considerate of teacher schedules and duty responsibilities when scheduling PLC meetings. Therefore, the presession and the first PLC session occurred in October 2018. Overall, there was high fidelity in adhering to the number of PLC sessions implemented as high fidelity was considered five out of six sessions and each teacher attended all the sessions.

Program participation. Dusenbury et al. (2003) defined program participation or responsiveness as the extent to which participants are engaged by and involved in the activities and content of the program. There was a purposeful sample of ninth-grade social studies coteachers: one general education social studies teacher and one special education teacher to create one pair. In the proposal, level of participation or responses consisted of co-pairs: *high* 3 out of 3, *medium* 2 out of 3 and *low* 1 out of 3. In this case, six participants were solicited, unfortunately, there was a low response rate as only one co-pair that agreed to participate. However, both teachers completed all aspects of the intervention study.

Attendance. Measuring attendance supported fidelity as dose or the amount of program content received by the participants helped to establish fidelity (Dusenbury et al., 2003). One way to measure dose was through their attendance because consistent attendance was a core component in establishing a PLC and being present to engage in the identified content (Venables, 2011). The parameters established in the initial study design to reflect the level of fidelity were high attendance, being present at five out of six sessions; medium attendance four out of six and low attendance three or less. Given that there was only one co-pair and that they attended all the sessions there was high fidelity for attending all the PLC sessions and the focus group.

Participant satisfaction. Participant satisfaction, according to Dusenbury et al. (2003), is assessed through the provider's effectiveness of the program's delivery. Program satisfaction was addressed through the focus group where the researcher served as the moderator. By means of discussion the participants answered questions as it related to their overall experiences Although the sessions were monthly October 2018 to January 2019, the teacher's comments showed some value added in attending:

> The special educator felt that having these conversations helped them to understand coteaching as it relates to planning together and working in the classroom and the regular educator stated that he has a new respect for coteaching, in that, he views it more of partnership now.

The participants expressed that they wished that the study could continue through the end of the school year because as they stated that having these conversations was beneficial to their partnership. To support this claim, Thousand et al. (2006) cited that "coteachers reported professional growth, personal support, and an enhanced sense of community with the general education classroom" (p. 240).

Program differentiation. When addressing fidelity, the program differentiation addresses the proposed process and procedures to the actual intervention implementation (Dusenbury et al., 2003). The proposed intervention was planned to begin in September 2018; however, the SSD IRB protocol prohibits study implementation during the first month of school. Therefore, PLC presession and session one began in October 2018. The remaining aspects of the study stayed the same in that that overall there were five PLC session and one focus group.

Conclusions Related to the Research

The purpose of this case study and explanatory design was to describe the coteacher's experiences with a directed dialogue and reflection during a PLC session as it pertains to collaborative instructional planning and presentation. The pre and post data from the CtRS indicated that they had similar answers in terms of the domains that impact coteaching: Interpersonal communication, physical arrangement, familiarity with curriculum, classroom management and assessment. However, there was a minor difference between them in the areas of instructional planning, instructional presentation and curriculum goals/modifications. As such, their goal was to focus on creating and maintaining time for collaborative planning. By the end of the case study, they gained knowledge about the different coteaching models; they identified

their individual strengths and differences using the data from CtRS; they created a coteaching goal that supported collaborative planning and facilitated additional coteaching models in the classroom as well as dialogued and reflected on their experiences of coteaching as it related to one another and other school responsibilities that appears to impact collaboration. Overall, it appears that the co-pair gained insight into their individual and joint collaborative practices and efficacy as they provided a rich description regarding their coteaching and PLC experiences.

Discussion

This section further discusses the findings from this case study and make connections between the findings and literature regarding coteaching. In addition, this section will elaborate on the conceptual framework (see Figure 2) of how JEPD model, through a PLC, supports discourse and reflection focused on coteaching practices (Croft et al., 2010).

The legal changes of IDEA (1997) and ESSA (2015) changed how an SWD could now be instructed in the mainstream classroom with their peers with the support of a highly qualified teacher. Because of changes, secondary special educators began teaching alongside regular educators as a collaborative partnership or coteaching. Research shows that coteaching can be a powerful approach to instruction when teachers are properly trained on the coteaching best practices, provided mutual planning time and supported by administrators (Murawski & Lochner, 2011). According to L. Cook and Friend (1995), one of the benefits of coteaching is that by having two teachers, the opportunity for lesson differentiation increases and hopefully the chance of students accessing the information. In this case study, the special educator reported that because they coplanned a lesson using the station (coteaching) method, that students were able to access the information quickly. In this case based on participant self-report, the use of a coteaching model allowed the students to work at different stations with the support of both

teachers. In a traditional classroom with one teacher, using the station method may prove more challenging. Thus, preventing students from learning using different modalities (Simmons & Magiera, 2007).

In an effective PLC, teachers must be willing to collaborate through dialogue, sharing of instructional plans and student data to discuss and reflect on one's practices and student achievement (DuFour, 2004; Venables, 2011). Based on their consistent attendance and active participation, this dyad was very cooperative and willing to discuss their individual and collective coteacher experiences. Once they shared their CtRS data with one another, they appeared pleased to see that they had items in common and their language also showed that they were committed to crafting a coteaching goal that worked for both. Murawski and Swanson (2001) report that the conversations that teachers have during their duty-day serve a catalyst for professional learning. Therefore, having this time together is significant to their partnership as well as student achievement. Scruggs et al. (2007) metasynthesis showed that mutual planning, and teacher attitude were important factors for successful coteaching. Fortunately, this co-pair had the same planning periods, but other school responsibilities often interfered with the amount of time they could coplan. On a positive note, after our first PLC session their goal was to create a schedule to coplan and commit to it. It was during the third PLC session that they entered with a jovial demeanor and commented on the positive outcome of their lesson. They told the researcher that they kept to their planning schedule and the result was a great lesson. While this data is descriptive in nature, their comments show real-life coteacher experiences as it relates to collaborative planning and presentation and the benefit of having these conversations.

Interferences with planning time appeared to be a major code for this co-pair, which aligns with most research on coteaching challenges (Friend et al., 2010; Hamilton-Jones & Vail,

2014; Howard & Potts, 2009; Scruggs et al., 2007). As the research has indicated, collaborative planning is foundation for establishing an effective coteaching partnership (L. Cook & Friend, 1995; Dieker & Murawski, 2003; Gerber & Popp, 2000). As such, the dyad spoke a lot about things that impeded or interfered with their instructional planning: Lack of time, outside variables and scheduling conflicts were the major subcodes. Specifically, they addressed how they would plan "on the fly" or use other creative means, such as talking or texting at night, or creating a Google classroom. While all good intentions, according to research, nothing compared to direct face-to-face interactions (Villa et al., 2008). Included in this discussion was their additional in-school responsibilities that sometimes-impacted planning. Such as being pulled for proctoring schoolwide testing or any another in-school necessity. Above all, based on their self-report, it appeared that the day-to-day school variables prevented them from using their planning time to work together; such as the special educator's need to attend student meetings and the regular educator's need to help students at lunch. Articles on coteaching allude to time being a precious entity for collaboration but building-level administrators or department chairpersons have to help support the co-pair's need for this time (Murawski, 2009). Without this support, teachers have reported feelings of frustration.

Research has shown that teachers report feelings of frustration, or a feeling of being upset or annoyed because of the inability to change or achieve something (Frustration, n.d.) as it related to planning and finding time to work together (Walther-Thomas, 1997). Specifically, in Keefe and Moore (2004) teachers reported that

> Finding time for communication and planning and was noted by most teachers. A general education teacher lamented, "we were planning on the fly most of the time. We talked after school. A lot of times we talked at lunch." Frustration was evident in the comment by a special education teacher, "But all this is so hard, trying to get it in the time because even with us, with our team meetings, we did not really have much time to work on curriculum." (p. 82)

The teachers, in this case study, self-reported feelings of frustration when attempting to plan together because they felt that other variables like in-school responsibilities, such as school-wide proctoring or attending student meetings took away opportunities for planning. These feelings of frustration can be circumvented by scheduling both the general education teacher and special education teacher with the same instructional planning time to aid (Mastropieri et al., 2005). However, none of this happen without the help of building-level administrators.

Support of building-level administrators, such as principals was briefly touched upon in the literature review, but it is worth mentioning in the discussion section because without their assistance effective coteaching does not happen (Isherwood & Barger-Anderson, 2008). Principals set the instructional tone for their building and they are responsible for what gets implemented or not (Rimpola, 2011). Because of their decision-making power, having their support sends a positive message to the instructional staff, students and community (Barnett & Monda-Amaya, 1998).

Overall, the teachers in this case study provided data to describe and detail their experiences with structured and reflective conversations about collaborative instructional planning and presentations. In addition, the CtRS (Gately & Gately, 2001) and open-ended efficacy questions (Tschannen-Moran & Hoy, 2001) allowed the coteachers to identify their coteaching strengths and challenges as well as their efficacy towards their instructional practices. They also voiced their concerns and frustrations about the inhibiting factors that keep them from collaborating. But, in the end, through self-report they shared that they felt more of team and would have liked to continue until the end of the school year.

Conceptual Framework

The conceptual framework looked at how JEPD supports high school coteacher's efficacy and instructional practices. JEPD fosters a direct link between research to practice by allowing teachers to make connections between their professional training and the classroom (DuFour, 2004). The PLC structure is one method of utilizing JEPD in a school to support both teaching and learning (Venables, 2011). Therefore, the conceptual framework uses the PLC time for the teachers to assess their knowledge and skills on the topics of coteaching, dialogue and reflect on their individual and collective practices and then adjust or modify their practices as needed.

In the SSD High School Z, the PLC structure is an existing framework. The difference for this PLC is the focused and reflective conversations regarding coteaching practices. It was also smaller, since it was the one coteaching pair and the researcher. Because collaboration requires the support of both parties, the CtRS results gave them information to work towards and they were able to craft a goal that supports their coteaching needs. Based on what both teachers shared during the PLC sessions and focus group, the researcher believed that they benefit from these conversations. During the focus group, the special educator pointed out that she feels more like they are partners now. Research from Murawski and Lochner (2011) indicated that teachers benefit from taking time to collaborate. Therefore, it appears that these teachers have a better understanding of the coteaching model and practices, as well as the importance of planning together.

Conclusion

As mentioned in Chapter I, the legal changes in IDEA (2004) and ESSA (2015) supports teaching SWDs in the mainstream classroom. Therefore, coteaching in an SSD high school is

standard practice to support these learners. According to Yin (2018) the rationale for using a single case study design is "to capture the circumstances and conditions of an everyday situation because it may provide lessons regarding social processes related to some theoretical interests" (p. 50). The findings of this case study describe how using their time during the PLC for direct dialogue and reflection captures their real-life coteaching experiences. While one limitation of this study is the small sample size, the findings may warrant the need to conduct a broader, in-depth study in the future.

Limitations and Recommendations

Since all studies are confronted with several limitations, the limitations for this study are now being presented:

- The time frame for conducting the PLC sessions was changed due to SSD IRB protocol. This time frame prohibited the researcher from working with the coteachers in September 2018. Since we started in October 2018 the co-pair had already worked with one another for one month.
- The sample size was small due to lack of coteacher participation. This small sample size prevented the researcher from gathering ample data regarding their coteaching practices.
- The SSD IRB protocol does not allow for needs assessments to be conducted; therefore, the researcher had to rely on preexisting data.
- The SSD IRB does not allow research to be conducted in a school building where the researcher is employed; therefore, the researcher had to facilitate the sessions in another SSD school building.

- The SSD IRB does not allow for recording of teacher instructional practices; ability to observe and record teachers using the coteaching method time to work meet with staff during the school day.

Recommendations

This section discusses the recommendations presented in this descriptive case study. As mentioned in Chapter II, WestEd (Bracco et al., 2015) conducted a special education review and one recommendation mentioned that "SSD should explore ways to increase collaboration between general educators, special educators and paraeducators" (p. 125). Based on this case study findings, the coteachers appear to benefit from having structured conversations and reflections on coteaching best practices during a PLC. Another recommendation for high school, is offer a one-day training, during the instructional planning week before the school year begins, to facilitate the CtRS and utilize the coteaching PowerPoint to facilitate instruction. During this time, the dyad can work together to discover their strengths and challenges within each domain, learn about the different coteaching models, and then use the remaining time to create a coteaching goal that best supports their partnership. This recommendation is based on multiple research articles that support the ideas that coteachers need training on coteaching model prior to working together, mutual planning time that supports collaboration, and opportunities for discourse and reflection to hone their craft (Chanmugam, 2013; L. Cook & Friend, 1995; Croft et al., 2010; Friend et al., 2010).

The last recommendation based involves administrative support is for building-level administrators to schedule their coteachers with mutual planning times for both teachers to ensure time for collaboration (Gerber & Popp, 2000). According to Scruggs et al. (2007),

administrators must be committed to creating a schedule that supports the needs of facilitating a coteaching model to support a collaborative partnership.

Conclusion

According to research, coteaching is one of the primary instructional methods used to support SWDs in the mainstream classroom (Friend et al., 2010). The goal is for the co-pair to work together with instructional planning and presenting, for the benefit of student achievement (Murawski, 2009). However, literature points out that there are hindrances that impede the collaborative planning and presentation process (Simmons & Magiera, 2007). Therefore, the intention of this case study was to describe the dyad's encounter with constructive conversation and rumination about their coteaching practices and efficacy during a PLC. As a result of their discussions, the co-pair provided detailed descriptions and information about how discourse allowed them to recognize their similarities and differences within their coteaching practices, knowledge about coteaching models, efficacy as it related to instructional practices, and personal feelings of frustration with variables that impact planning. Above all, they both reported that having these conversations helped to make them more a team and that it was a valuable experience.

Appendix A

Data Collection Matrix

Indicator	Data Collection	Frequency	Responsibility	Research Questions
Evidence of coteacher collaboration	Coteaching Rating Scale (Gately & Gately, 2001);	October 2018 January 2019	Researcher	How does the use of the CtRS influence 9th grade social studies coteacher's instructional planning?
	PLC Agenda and Discussion Notes	October 2019–January 2019	Researcher	
	Focus Group	January 2019		How does reflection within PLC coteaching sessions influence coteacher's instructional collaboration practices?
Teacher efficacy	Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001)	October 2018–January 2019	Researcher	What are the 9th grade social teachers and special education teachers' perceptions of coteaching as an instructional strategy?
Demographics	Teacher information form	October 2018	Researcher	
PLC attendance	Entrance slips and exit tickets; CtRS pre and post sheets; focus group	October 2018–January 2019	Researcher	

Appendix B

Coteaching Rating Scale

Respond to each question below by circling the number that best describes your viewpoint 1 = rarely, 2 = sometimes, 3 = usually).

1. I can easily read the nonverbal cues of my co-teaching partner.	1	2	3
2. I feel comfortable moving freely about the space in the co-taught classroom.	1	2	3
3. I understand the curriculum standards with respect to the content area(s) in the co-taught classroom.	1	2	3
4. Both teachers in the co-taught classroom agree on the goals of the co-taught classroom.	1	2	3
5. Planning is spontaneous, with changes possibly occurring during the instructional lesson.	1	2	3
6. I often present lessons in the co-taught classroom.	1	2	3
7. Classroom rules and routines have been jointly developed.	1	2	3
8. Many measures are used for grading.	1	2	3
9. Humor is often used in the classroom.	1	2	3
10. All materials are shared in the classroom. (Student records, teaching resources, etc.)	1	2	3
11. I am familiar with the method and materials with respect to the content area(s).	1	2	3
12. Modifications of goals for students with special needs are incorporated into the general education class.	1	2	3
13. Planning for classes is the shared responsibility of both teachers.	1	2	3
14. The “chalk” passes freely between two teachers during lessons.	1	2	3
15. A variety of classroom management techniques are utilized to enhance learning of all students.	1	2	3
16. Test modifications are commonplace.	1	2	3
17. Communication is open and honest.	1	2	3
18. There is fluid positioning of teachers in the classroom.	1	2	3
19. I feel confident in my knowledge of the curriculum content.	1	2	3
20. Student-centered objectives are incorporated into the classroom curriculum.	1	2	3
21. Time is allotted (or created) for common planning.	1	2	3
22. Students accept both teachers as equal partners in the learning process.	1	2	3
23. Behavior management is the shared responsibility of both teachers.	1	2	3
24. Goals and objectives in IEPs are considered as part of the grading for students with special needs.	1	2	3

Appendix C

Coteaching Rating Scale Scoring Sheet—Regular Education Teacher

Interpersonal Communication			Physical Arrangement			Familiarity with the Curriculum		
	October 2018	January 2019		October 2018	January 2019		October 2018	January 2019
1.	3	3	2.	3	3	3.	3	3
9.	3	3	10.	3	3	11.	3	3
17.	3	3	18.	3	3	19.	3	3
Total:	9	9	Total:	9	9	Total:	9	9

Curriculum Communication			Instructional Planning			Instructional Presentation		
	October 2018	January 2019		October 2018	January 2019		October 2018	January 2019
4.	3	3	5.	3	3	6.	3	3
12.	3	3	13.	3	3	14.	3	3
20.	3	3	21.	2	3	22.	3	3
Total:	9	9	Total:	8	9	Total:	9	9

Classroom Management			Assessment		
	October 2018	January 2019		October 2018	January 2019
7.	3	3	8.	3	3
15.	3	3	16.	3	3
23.	3	3	24.	3	3
Total:	9	9	Total:	9	9

Appendix D

Coteaching Rating Scale Scoring Sheet—Special Education Teacher

Interpersonal Communication			Physical Arrangement			Familiarity with the Curriculum		
	October 2018	January 2019		October 2018	January 2019		October 2018	January 2019
1.	3	3	2.	3	3	3.	3	3
9.	3	3	10.	3	3	11.	2	3
17.	3	3	18.	3	3	19.	2	3
Total:	9	9	Total:	9	9	Total:	9	9

Curriculum Communication			Instructional Planning			Instructional Presentation		
	October 2018	January 2019		October 2018	January 2019		October 2018	January 2019
4.	3	3	5.	3	3	6.	2	3
12.	3	3	13.	3	3	14.	3	3
20.	2	3	21.	2	3	22.	2	3
Total:	8	9	Total:	8	9	Total:	7	9

Classroom Management			Assessment		
	October 2018	January 2019		October 2018	January 2019
7.	3	3	8.	3	3
15.	3	3	16.	3	3
23.	3	3	24.	2	3
Total:	9	9	Total:	8	9

Appendix E

Coteacher PLC Schedule (October 2018–January 2019)

October 3 - Presession

October 12 - Session One

October 17 - social studies cohort planning

October 23 - social studies cohort planning

November 2 - Session Two

November 7 - social studies cohort planning

November 14 - social studies cohort planning

November 21 - half day of school

November 28 - social studies cohort -planning

December 7 - session Three

December 12 - no planning schoolwide testing

December 19 - no planning schoolwide testing

December 26 - school closed

January 4 - session Four

**January 11 - Focus Group

**Due to end of semester teacher planning grading, the focus group occurs earlier than originally proposed.

Appendix F

Coteaching Stages (Gately & Gately, 2001)

Beginning stage: Guarded communication, lack of openness with each other; may leave dissatisfaction unstated; polite, small talk.

Compromising stage: conversation is more open, give and take ideas, increase in the use of humor.

Collaborating stage: teachers become role models for effective communication with students; increased use of nonverbal signals to communicate

Appendix G

Teachers' Sense of Efficacy Scale (Short Form; Tschannen-Moran & Hoy, 2001)

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.

Teacher Beliefs How much can you do?

Nothing (1–2) Very Little (3–4) Some (5–6) Quite A Bit (7–8) A Great Deal (9)

1. How much can you do to control disruptive behavior in the classroom?

2. How much can you do to motivate students who show low interest in school work?

3. How much can you do to get students to believe they can do well in school work?

4. How much can you do to help your students value learning?

5. To what extent can you craft good questions for your students?

6. How much can you do to get children to follow classroom rules?

7. How much can you do to calm a student who is disruptive or noisy?

8. How well can you establish a classroom management system with each group of students?

9. How much can you use a variety of assessment strategies?

10. To what extent can you provide an alternative explanation or example when students are confused?

11. How much can you assist families in helping their children do well in school?

12. How well can you implement alternative strategies in your classroom?

Appendix H

Teachers' Sense of Efficacy Scale (Open-Ended; Tschannen-Moran & Hoy, 2001)

Think about your teaching practices since the beginning of the school year and think about how things are going now. Take a few moments to give yourself an honest assessment of your beliefs about things that create difficulties with their classroom activities/instruction.

To what extent can you craft good questions for your students? (How do you determine whether or not you have asked a good question)

How much can you use a variety of assessment strategies? (What assessment strategies do you use? How do you determine when you use them? How varied are these strategies?)

To what extent can you provide an alternative explanation or example when students are confused? (Tell me your process for checking for understanding. How do you check for understanding? What do you do when you determine a student is no getting a concept?)

Appendix I

Focus Group Questions

1. Engagement questions: introduce participants to and make them comfortable with the topic of discussion

- · What do you think about when you hear the phrase coteaching?
  - Probe: Is this the same way you thought about coteaching at the beginning of our PLC focus? Please explain.

2. Exploration questions: get to the meat of the discussion

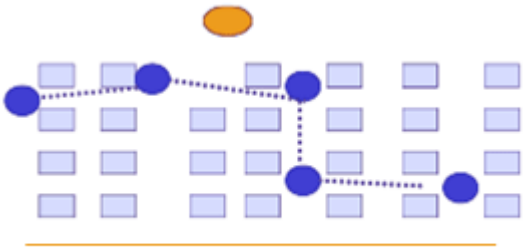
- Tell me about how your co-pair operated?
  - Probe: What was the planning process like? Explain.
  - Probe: What did instruction look like in the classroom?
    - Did it align to the lesson plan? Why or why not?
    - Did it align with the co-pairs selected coteaching strategy? Why or why not?
- Thinking about our PLC sessions focused on coteaching what words come to mind and why?
  - Probe: Which learning activities were most beneficial to the co-pair?
  - Probe: What were the strengths of the PLC sessions focused on coteaching?
  - Probe: What are some suggestions for improvement?
    - Should this process be used again? Why or why not?
- Share your thoughts about the CtRS?
  - Was using it beneficial towards improving collaboration? Why or why not?
  - What changes would you make to the CtRS and why?

3. Exit question: check to see if anything was missed in the discussion

Please share anything else about coteaching and/or the PLC sessions focused on coteaching.

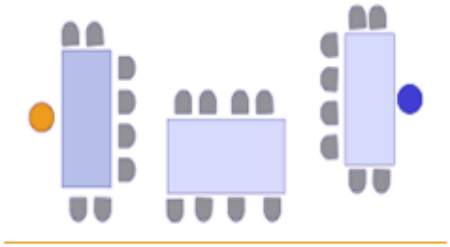
Appendix J

Coteaching Models (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010)



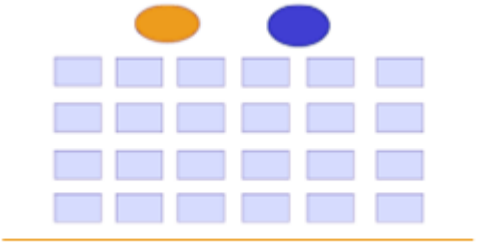
One Teach/One Support

One teacher leads instruction, while the other provides support to students who need additional assistance or provides classroom management. Parity of roles when lessons are presented. Both teachers know the distinct role they are carrying out in the lesson.



Station Teaching

Each teacher works with a small group of students who rotate among various stations to complete the different lessons related to the same instructional content/objective. Teachers must communicate to coordinate the tasks and timing at the different stations to support the learning objectives.



Team Teaching

Both teachers share the instructional role and "play off" each other during the lesson. Team Teaching shows clear evidence that the teachers planned together to integrate their roles within the lesson.

One teacher instructs a large group while the other works with a smaller group. Teachers collaborate to determine the groups and the objectives and expected outcomes, activities, and assessment for the content they are teaching to their individual groups.

Students are placed into small groups with each co-teacher responsible for implementing the same lesson to a group. Collaborative planning and communications must be facilitated to develop the parallel structure and to assure that groups receive the same level instruction.

Appendix K

Coteacher Professional Learning Community Sessions Outline

Presession
Objective: By the end of this PLC presession, coteachers will have completed the necessary forms to participate in this study and discuss coteacher PLC session expectations.
Agenda:

- Complete consent form & demographic information,
- Discuss PLC attendance and expectations
- Administer the Coteaching Rating Scale and 4 open ended teacher efficacy questions on instructional practices.
- Determine next meeting date

Session One
Objective: By the end of this PLC session, coteachers will learn the coteaching best practices and coteaching models. They will review and discuss their Coteaching Rating Scale (CtRS) scores and create a coteaching goal.
Agenda:

- Review CtRS scores (individually)
- Present coteaching best practices/coteaching model power point
- Discuss how coteaching best practices and power point relate to the CtRS scores
- Review CtRS score with coteacher to develop coteaching goal
- Determine next meeting date

Session Two & Three
Objective: By the end of this PLC session, coteachers will identify and discuss their strengths and challenges regarding meeting their coteaching goal.
Agenda:

- Entrance slip: Did you reach your coteaching goal? What worked? What didn't work?
- Group discussion and reflection
- Create new coteaching goal or decide to work towards same goal
- Determine next meeting date

Session Four
Objective: By the end of this PLC session, coteachers will continue to evaluate their coteaching knowledge as well as dialogue and reflect on their strength and challenges towards collaboration.
Agenda:

- Administer CtRS second time
- Entrance Slip: Entrance slip: Did you reach your coteaching goal? What worked? What didn't work?
- Group discussion and reflection
- Exit slip: Instructional efficacy questions
- Determine dates for focus group

Focus Group

Objective: By the end of this session, coteachers will identify change towards collaboration through discussion and reflection.

Agenda:

- Review and reflect on first and second CtRS scores and instructional efficacy questions
- Present and discuss focus group questions
- Wrap-up (last PLC meeting)

Appendix L

Entrance and Exit Slips

Entrance slip questions: Did you reach your coteaching goal?
What worked?
What didn't work?

Exit slip question: After reflecting upon today's discussion, what was learned?

Appendix M

SSD WestEd Special Education Recommendations Regarding IEP Implementation

Recommendation 2.1
SSD should collect information to assess the extent to which the schools use the Guide to Planning and Assessing School-Based Special Education Programs and provide professional development to ensure that schools are using it effectively. The guide is designed to help individual school improvement teams engage in continuous improvement of special education services delivery. It is also the only systematic process for assessing special education services.

Recommendation 2.2
SSD should develop a more systematic process to monitor and improve the services provided to student with disabilities and assess the staffing models. Considering the achievement gaps between students with disabilities and the general education population, there is a need to understand the effectiveness of the programs, services, and staffing models that SSD provides. While school staff continuously assess their staffing levels to ensure students receive services, there is no process to understand how models such as coteaching actually work or improve outcomes for students. Implementation analysis is key strategy for understanding how programs work and making modifications.

Recommendation 2.3
SSD should provide opportunities for teachers to discuss and implement strategies for parent communication regarding the provision of services in the IEPs. Surveys indicated that not all parents receive information about services. Focus groups revealed that while most parents get information if requested, others had to develop their own process for ensuring they received information. Since information-sharing is dependent upon the teacher and practices vary, it would be most productive for good communicators to discuss best practices with their colleagues. And as one parent noted, it does not need to be a formal process.

Recommendation 2.4
SSD should explore ways to increase collaboration between general education teachers and special education teachers and paraeducators. Surveys indicated that while most teachers collaborated, the level of collaboration could be improved. SSD should explore technology options to share information and resources.

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Curriculum Vitae

Jennifer G. Harris has spent over twenty-four years working as a special education teacher to students with emotional, learning and physical disabilities. Over the years, she has mentored numerous teachers new to coteaching. Currently, supports special education high school students transition to post-secondary education and careers by helping them navigate the college and career process. As a lifelong learner, she holds a bachelor's degree from Bowie State University, Master of Art from University of College Park, Educational Specialist from George Washington University and Doctor of Education from Johns Hopkins University. She is a strong advocate of teacher collaboration when working with students with disabilities in the mainstream classroom. Her professional goal is to collaborate with school districts that use the coteaching model as an instructional model for students with disabilities by incorporating effective professional learning communities. In her spare time, she enjoys reading books, listening to music and spending quality time with her two children.